ORDER NO. AD0009156A1

A6

Service Manual

DVD Audio/Video Player

SL-HDA710

Traverse Deck : RAY0203-M Mechanism Series

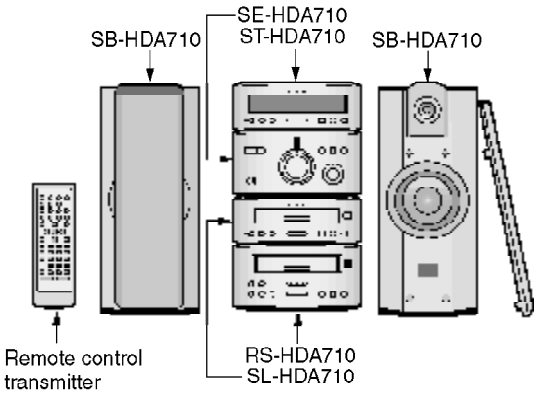
Colour

(N).....Gold Type

Area

PP.....U.S.A. and Canada.

Please file and use this manual together with the service manual for Model No. SL-HDA710, Order No. 0008146C2.



SPECIFICATIONS

Specification

■ **Disc played**

DVD-AUDIO/ VIDEO disc	**8/12cm single-sided, single-layer / 8/12cm single-sided, double-layer / 8/12cm double-sided, double-layer (one layer per side)**
CD (CD-DA, VIDEO-CD)	**8/12cm discs**

■ **Audio**

Number of channels	**5.1 (FL, FR, SL, SR, C, SW)**
Output level	**1.7k**
Frequency response	
DVD-AUDIO 192kHz sampling	**10-88kHz**
CD-DA	**10-20kHz**
SN ratio	
DVD-AUDIO (mixed output)	**110dB**
Dynamic range	
DVD-AUDIO (mixed output)	**100dB**

■ **Video**

Signal system	**NTSC**
Output level (75)	
Composite video	**1Vp-p**
S-video Y	**1Vp-p**
S-video C	**0.286Vp-p (NTSC)**

■ **Digital output terminal** **Optical×1**

■ **Pick up wavelength** **668nm**

■ **General**

Dimensions (WxHxD):	**196x76.8x293mm / (7-23/32”x3-1/32”x11-17/32”)**
Weight:	**1.7kg**

Notes:

1. **Design and specifications are subject to change without notice.**
2. **Dimensions and weight are approximate.**

■ **System/SC-HDA710**

Tuner:ST-HDA710, DVD Audio/ Video Player:SL-HDA710, Amplifier:SE-HDA710, Cassette Deck:RS-HDA710, Speakers: SB-HDA710 (Made in MESA.)

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic®

1. Simplified Guide

This manual mentions the revision of original Service Manual SL-HDA710(E).

- Schematic Diagram (B DVD MODULE (1) circuit.)

- Printed Circuit Board Diagram (B DVD MODULE (1) P.C.B..)

- Replacement Parts List (Change)

The other items are refered to original Service Manual.

2. Schematic Diagram (Change)

(Refer to "14. Schematic Diagram" of original Service Manual)

3. Printed Circuit Board Diagram (Change)

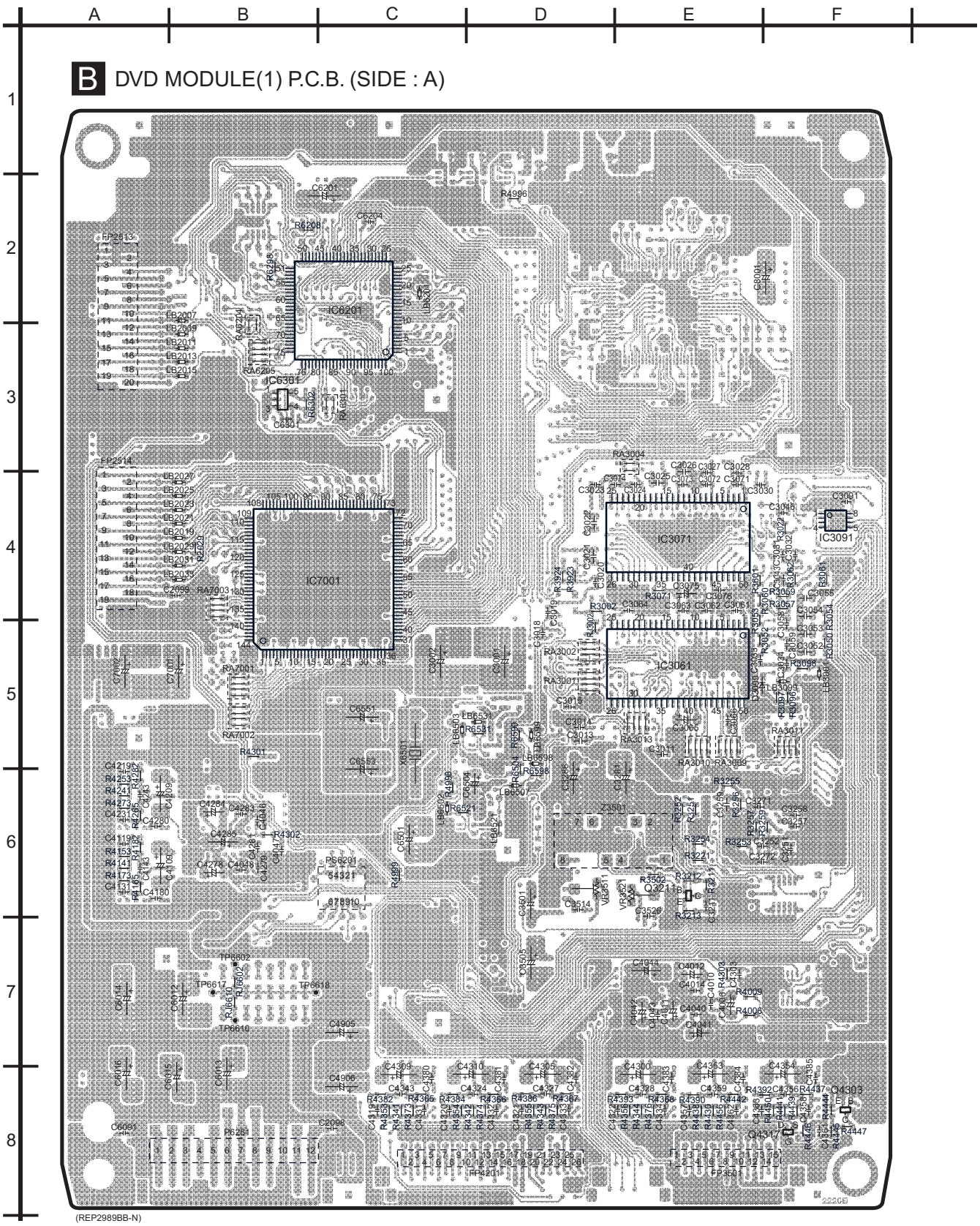
(Refer to "15. Printed Circuit Board Diagram." of original Service Manual)

4. Change of Replacement Parts List (Refer to pages 81-84 of original Service Manual.)

Notes:

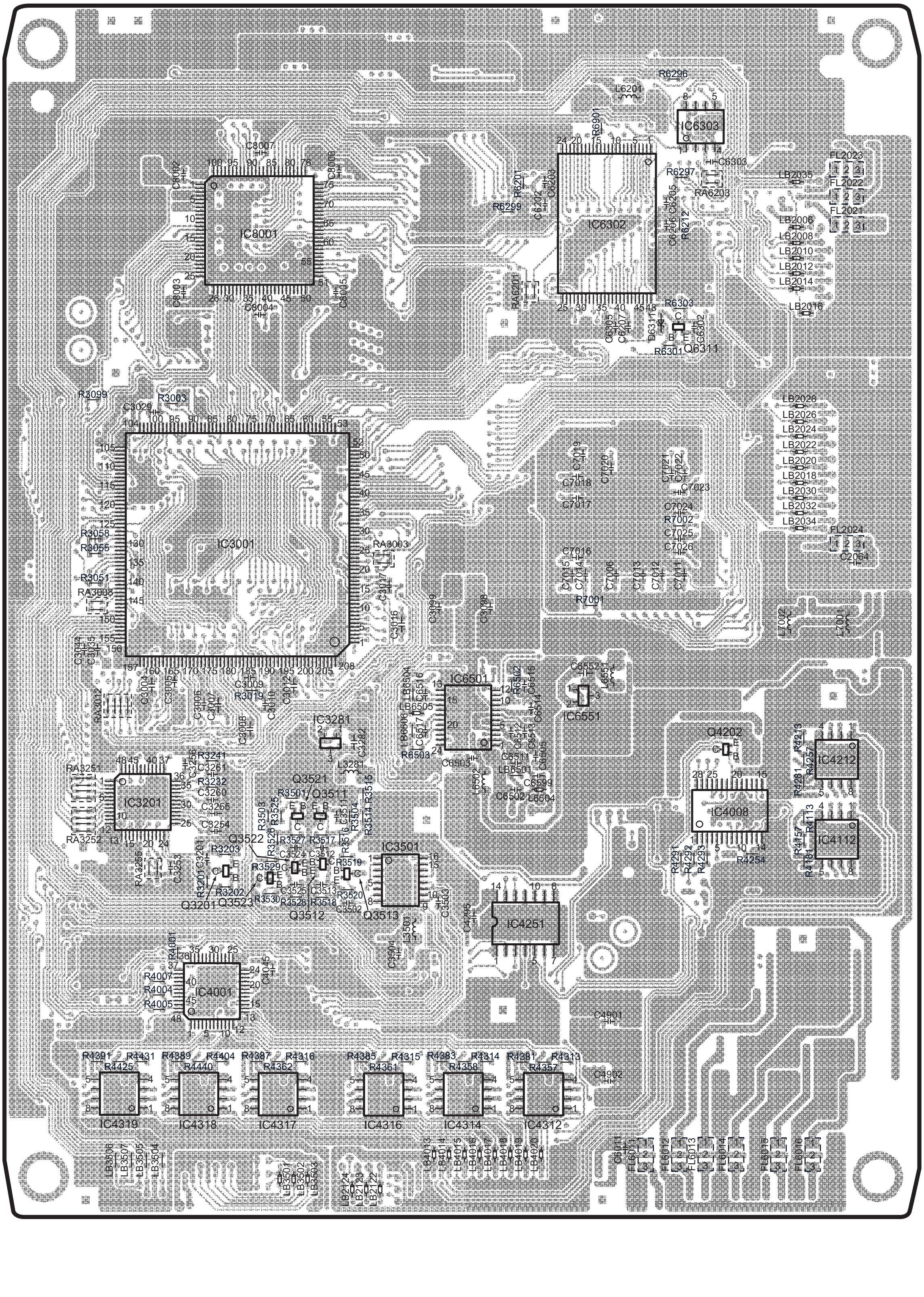
***Important safety notice:**
Components identified by ⚠ mark have special characteristics important for safety.
Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.
***When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.**
***The parenthesized indications in the Remarks columns specify the areas. (Refer to the cover page for area.)**
Parts without these indications can be used for all areas.
***Capacity values are in microfarads (μ F) unless specified otherwise, P=Pico-farads (pF), F=Farads (F)**
***Resistance values are in ohms, unless specified otherwise, 1K= 1,000 (OHM), 1M=1,000k (OHM)**
***The marking (RTL) indicates that the Retention Time is limited for this item. After the discontinuation of this assembly in production, the item will continue to be available for a specific period of time.**

B DVD MODULE(1) P.C.B. (SIDE : A)



G H I J K L

B DVD MODULE(1) P.C.B. (SIDE : B)


IC8001
IC6303
IC6302
IC3001
IC6501
IC6551
IC3281
IC3201
IC3501
IC4008
IC4212
IC4112
IC4251
IC4001
IC4319
IC4318
IC4317
IC4316
IC4314
IC4312
Q3201
Q3521
Q3511
Q3522
Q3523
Q3512
Q3513
Q4202
Q6311
D6311
RA3008
RA3003
RA3012
RA3251
RA3252
RA3255
RA6201
RA6203
FL2021
FL2022
FL2023
FL2024
FL6011
FL6012
FL6013
FL6014
FL6015
FL6016
L6201
L7001
L7002
L3281
L3501
L6502
L6551
C4901
C4902
C2064
R7001
R7002
R6296
R6297
R6299
R6301
R6303
R6901
R3099
R3003
R4254

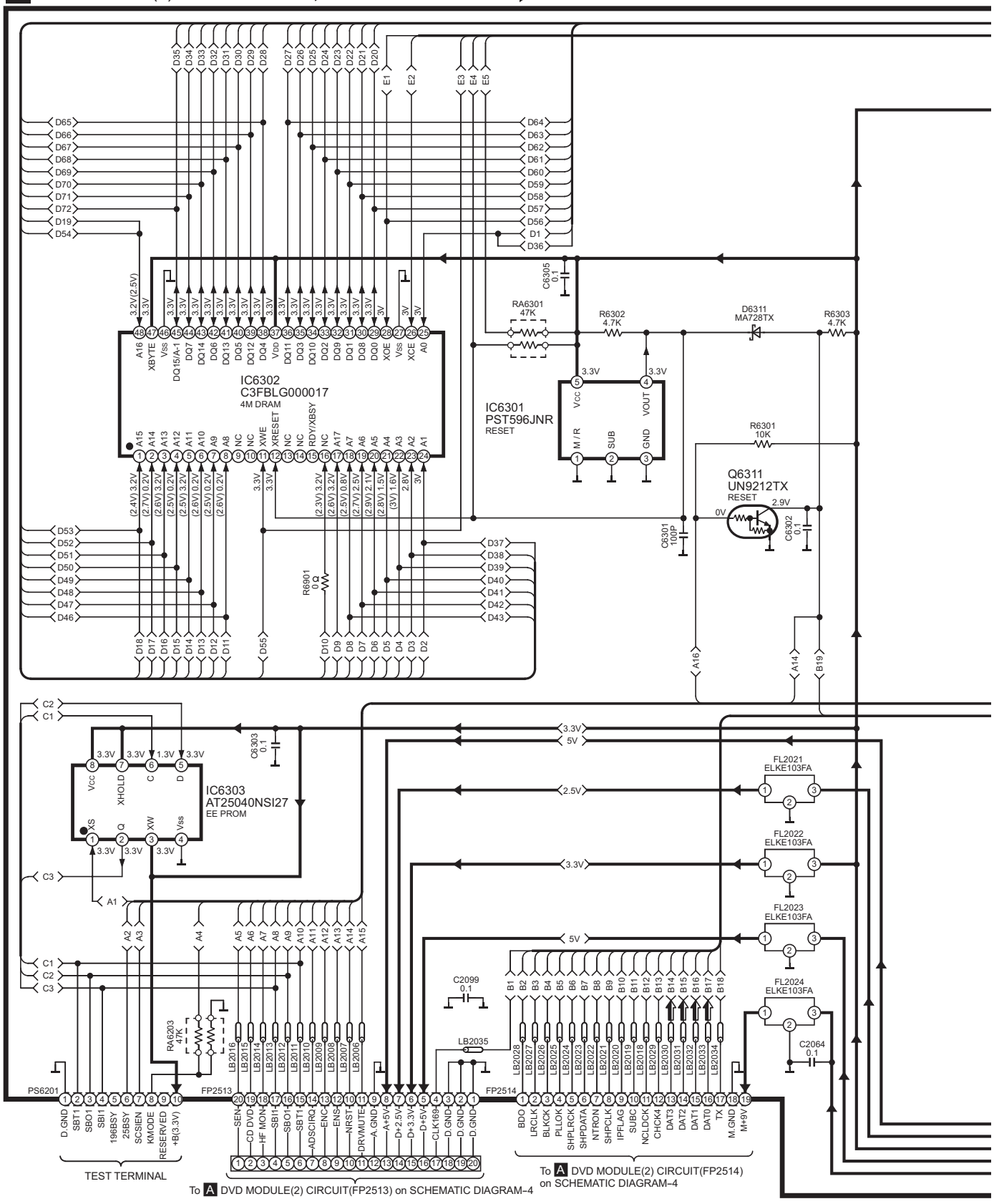
■ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
B DVD MODULE(1) P.C.B. (SIDE: A)															
IC3061	5E	LB6521	6D	R3213	6E	R4365	8C	RJ3002	5D	C3063	4E	C4048	6B	C4357	8E
IC3071	4E	LB6531	5D	R3221	6E	R4366	8D	RJ6602	7B	C3064	4E	C4109	6A	C4358	8F
IC3091	4F	LB6598	5D	R3251	6E	R4367	8D	RJ6610	7B	C3065	5E	C4119	6A	C4359	8E
IC6201	2C	LB6599	5D	R3252	6E	R4368	8E	C2098	8C	C3066	5E	C4131	6A	C4361	8F
IC6301	3B	P6251	8B	R3253	6E	R4373	8C	C2099	4B	C3071	4E	C4143	6A	C4362	8E
IC7001	4C	PS6201	6C	R3254	6E	R4374	8D	C3001	5D	C3072	4E	C4180	6A	C4363	8E
Q3211	6E	RA3001	5D	R3255	6E	R4375	8D	C3002	5C	C3073	4E	C4209	6A	C4380	8C
Q4303	8F	RA3002	5D	R3256	6E	R4376	8E	C3011	5E	C3074	4E	C4219	6A	C4381	8D
Q4317	8F	RA3004	3E	R3257	6E	R4382	8C	C3013	5D	C3075	4E	C4231	6A	C4382	8D
D3099	5E	RA3009	5E	R3259	6F	R4384	8C	C3014	5D	C3076	4E	C4243	6A	C4383	8E
VR3511	6D	RA3010	5E	R3502	6E	R4386	8D	C3015	5D	C3091	4F	C4278	6B	C4384	8E
VR3521	6E	RA3011	5F	R3601	4E	R4390	8E	C3018	5D	C3211	6E	C4279	6B	C4385	8F
Z3501	6E	RA3013	5E	R3923	4D	R4392	8F	C3019	4D	C3251	6F	C4280	6A	C4905	7C
X6501	5C	RA6204	3B	R3924	4D	R4393	8E	C3020	4D	C3252	6F	C4281	6B	C4906	8C
FP2513	2A	RA6205	3B	R4006	7E	R4430	8E	C3021	4D	C3257	6F	C4283	6B	C6012	7B
FP2514	4A	RA6301	3C	R4009	7E	R4437	8F	C3022	4D	C3258	6F	C4284	6B	C6013	8B
FP3501	8E	RA7001	5B	R4141	6A	R4438	8E	C3023	4D	C3259	6E	C4285	6B	C6014	7A
FP4201	8D	RA7002	5B	R4153	6A	R4439	8F	C3024	4E	C3271	6E	C4300	8E	C6015	8B
LB2007	2B	RA7003	4B	R4165	6A	R4441	8F	C3025	4E	C3272	6F	C4303	7E	C6016	8A
LB2009	3B	R2029	4B	R4173	6A	R4442	8E	C3026	3E	C3281	6E	C4305	8D	C6091	8A
LB2011	3B	R3002	4D	R4182	6A	R4444	8F	C3027	3E	C3286	6D	C4309	8C	C6201	2C
LB2013	3B	R3022	4F	R4241	6A	R4445	8F	C3028	3E	C3501	6D	C4310	8D	C6204	2C
LB2015	3B	R3050	5F	R4253	6A	R4446	8F	C3030	4E	C3505	7D	C4319	8C	C6301	3B
LB2019	4B	R3052	5F	R4265	6A	R4447	8F	C3031	4F	C3514	6D	C4320	8C	C6501	6C
LB2021	4B	R3053	4E	R4273	6A	R4450	8F	C3032	4F	C3526	6E	C4321	8D	C6504	6D
LB2023	4B	R3054	4F	R4282	6A	R4456	8E	C3033	5E	C4006	7E	C4322	8E	C6551	5C
LB2025	4B	R3057	4F	R4301	5B	R4996	2D	C3034	5F	C4010	7E	C4324	8D	C6553	5C
LB2027	4B	R3059	4F	R4302	6B	R4998	6C	C3043	4F	C4011	7E	C4327	8D	C7001	5B
LB2029	4B	R3060	4F	R4303	7E	R4999	6C	C3046	4F	C4012	7E	C4328	8E	C7002	5A
LB2031	4B	R3061	4F	R4341	8C	R6208	2B	C3052	5F	C4014	7E	C4331	8C	C8001	2F
LB2033	4B	R3062	4F	R4342	8D	R6298	2B	C3053	5F	C4040	7E	C4332	8D		
LB3001	5F	R3071	4E	R4343	8D	R6302	3B	C3054	4F	C4041	7E	C4333	8D		
LB3099	5F	R3096	5F	R4344	8E	R6504	5D	C3055	4F	C4042	7E	C4334	8E		
LB6201	2C	R3097	5F	R4353	8C	R6521	6C	C3058	5F	C4043	7E	C4343	8C		
LB6502	6C	R3098	5F	R4354	8C	R6531	5D	C3059	5F	C4044	7E	C4353	8E		
LB6503	5C	R3211	6E	R4355	8D	R6598	6D	C3061	4E	C4046	6B	C4354	8F		
LB6507	6D	R3212	6E	R4356	8E	R6599	5D	C3062	4E	C4047	6B	C4356	8F		
B DVD MODULE(1) P.C.B. (SIDE: B)															
IC3001	4H	L3501	7I	LB2034	4L	RA6203	2K	R4007	7H	R6296	2K	C3260	6H	C6515	5J
IC3201	6H	L6201	2K	LB2035	2L	R3003	3H	R4113	6L	R6297	2K	C3261	6H	C6516	5I
IC3281	6I	L6502	6J	LB2122	8I	R3019	5H	R4157	6L	R6299	2J	C3282	6I	C6517	5I
IC3501	6I	L6504	6J	LB2123	8I	R3051	5G	R4181	6L	R6301	3K	C3502	7I	C6552	5J
IC4001	7H	L6551	5J	LB2124	8I	R3055	4G	R4213	6L	R6303	3K	C3503	7I	C6599	6J
IC4008	6K	L7001	5L	LB3501	8H	R3058	4G	R4254	6K	R6502	5J	C3504	7I	C7006	5J
IC4112	6L	L7002	5L	LB3502	8I	R3099	3G	R4257	6L	R6503	6I	C3511	6I	C7011	5K
IC4212	6L	FL2021	2L	LB3503	8I	R3201	6H	R4281	6L	R6901	2J	C3512	6I	C7012	5K
IC4251	7J	FL2022	2L	LB3504	8H	R3202	6H	R4291	6K	R7001	5J	C3513	6I	C7013	5K
IC4312	8J	FL2023	2L	LB3505	8H	R3203	6H	R4292	6K	R7002	4K	C3524	6I	C7014	5J
IC4314	8J	FL2024	4L	LB3506	8G	R3232	6H	R4293	6K	C2064	4L	C3525	6I	C7015	5J
IC4316	8I	FL6011	8K	LB3507	8H	R3241	6H	R4313	7J	C3004	5H	C4045	7H	C7016	4J
IC4317	8H	FL6012	8K	LB4013	8I	R3501	6H	R4314	7J	C3005	5H	C4295	7J	C7017	4J
IC4318	8H	FL6013	8K	LB4014	8I	R3503	6H	R4315	7I	C3006	5H	C4901	7J	C7018	4J
IC4319	8G	FL6014	8K	LB4015	8J	R3504	6I	R4316	7I	C3007	5H	C4902	8J	C7019	4J
IC6302	2J	FL6015	8K	LB4016	8J	R3514	6I	R4357	8J	C3008	5H	C6011	8J	C7020	4J
IC6303	2K	FL6016	8L	LB4017	8J	R3515	6I	R4358	8J	C3009	5H	C6202	2J	C7021	4K
IC6501	5J	LB2006	2L	LB4018	8J	R3516	6I	R4361	8I	C3010	5H	C6203	2J	C7022	4K
IC6551	5J	LB2008	3L	LB4019	8J	R3517	6I	R4362	8H	C3012	5H	C6205	2K	C7023	4K
IC8001	2H	LB2010	3L	LB4020	8J	R3518	7I	R4381	7J	C3016	5I	C6206	2K	C7024	4K
Q3201	6H	LB2012	3L	LB6501	6J	R3519	6I	R4383	7I	C3017	5I	C6207	3K	C7025	4K
Q3511	6I	LB2014	3L	LB6504	5I	R3520	6I	R4385	7I	C3029	4H	C6302	3K	C7026	4K
Q3512	6I	LB2016	3L	LB6505	5I	R3525	6H	R4387	7H	C3035	5G	C6303	2K	C8002	2H
Q3513	6I	LB2018	4L	LB6506	5I	R3526	6H	R4389	7H	C3044	5G	C6305	3J	C8003	3H
Q3521	6I	LB2020	4L	RA3003	4I	R3527	6I	R4391	7G	C3098	5J	C6502	6J	C8004	3H
Q3522	6I	LB2022	4L	RA3008	5G	R3528	7I	R4404	7H	C3099	5I	C6503	6J	C8005	3I
Q3523	6H	LB2024	4L	RA3012	5G	R3529	6H	R4425	8G	C3201	6H	C6505	6J	C8006	2I
Q4202	6K	LB2026	4L	RA3251	6G	R3530	6H	R4431	7H	C3253	6H	C6511	6J	C8007	2H
Q6311	3K	LB2028	4L	RA3252	6G	R4001	7H	R4440	8H	C3254	6H	C6512	6J		
D6311	3K	LB2030	4L	RA3255	6H	R4004	7H	R6201	2J	C3255	6H	C6513	6J		
L3281	6I	LB2032	4L	RA6201	3J	R4005	7H	R6212	2K	C3256	6H	C6514	5J		

SCHEMATIC DIAGRAM-5

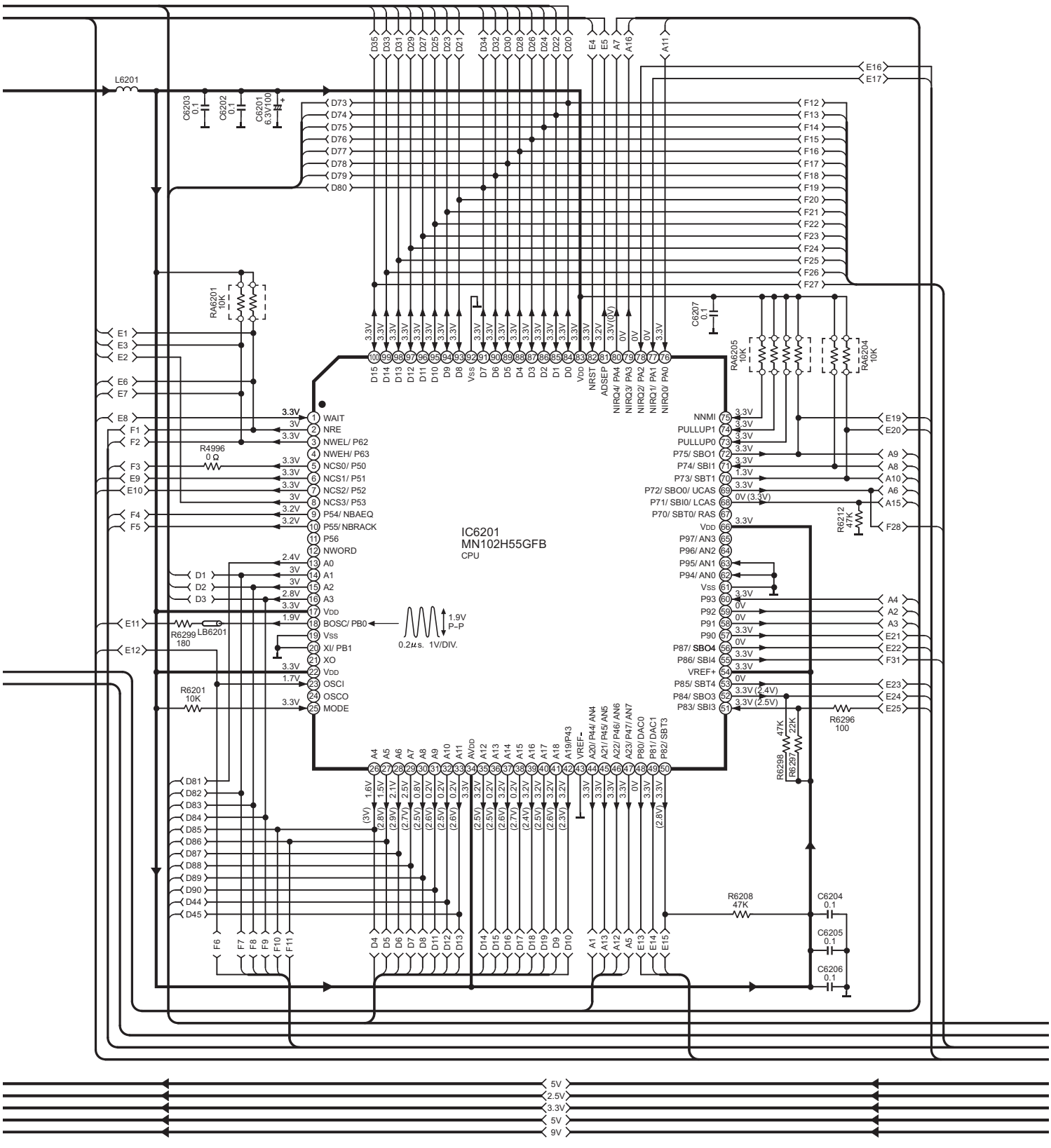
B DVD MODULE(1) CIRCUIT

: POSITIVE VOLTAGE LINE : VIDEO / AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-6

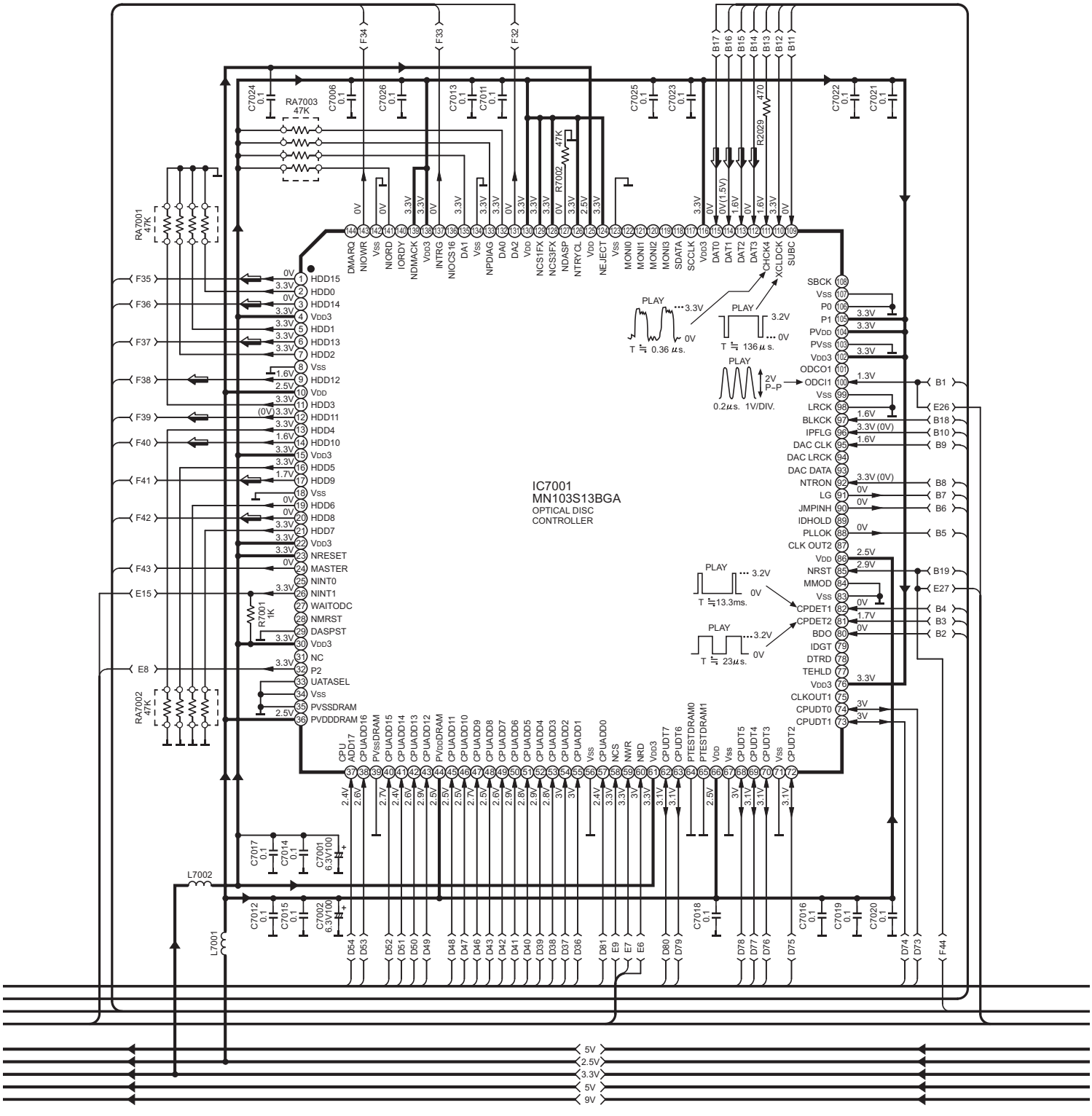
: POSITIVE VOLTAGE LINE



SCHEMATIC DIAGRAM-7

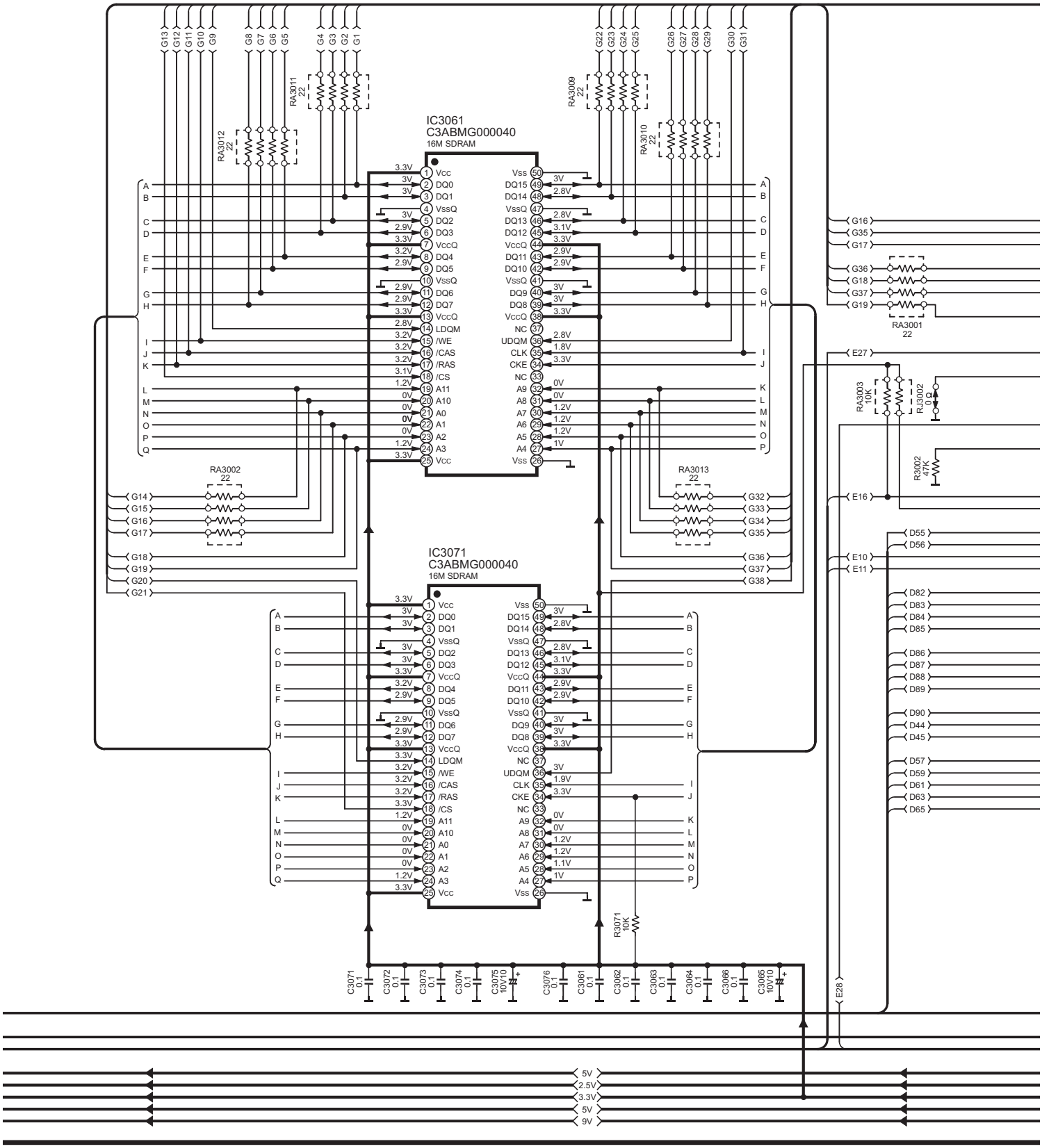
B DVD MODULE(1) CIRCUIT

: POSITIVE VOLTAGE LINE : VIDEO / AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-8

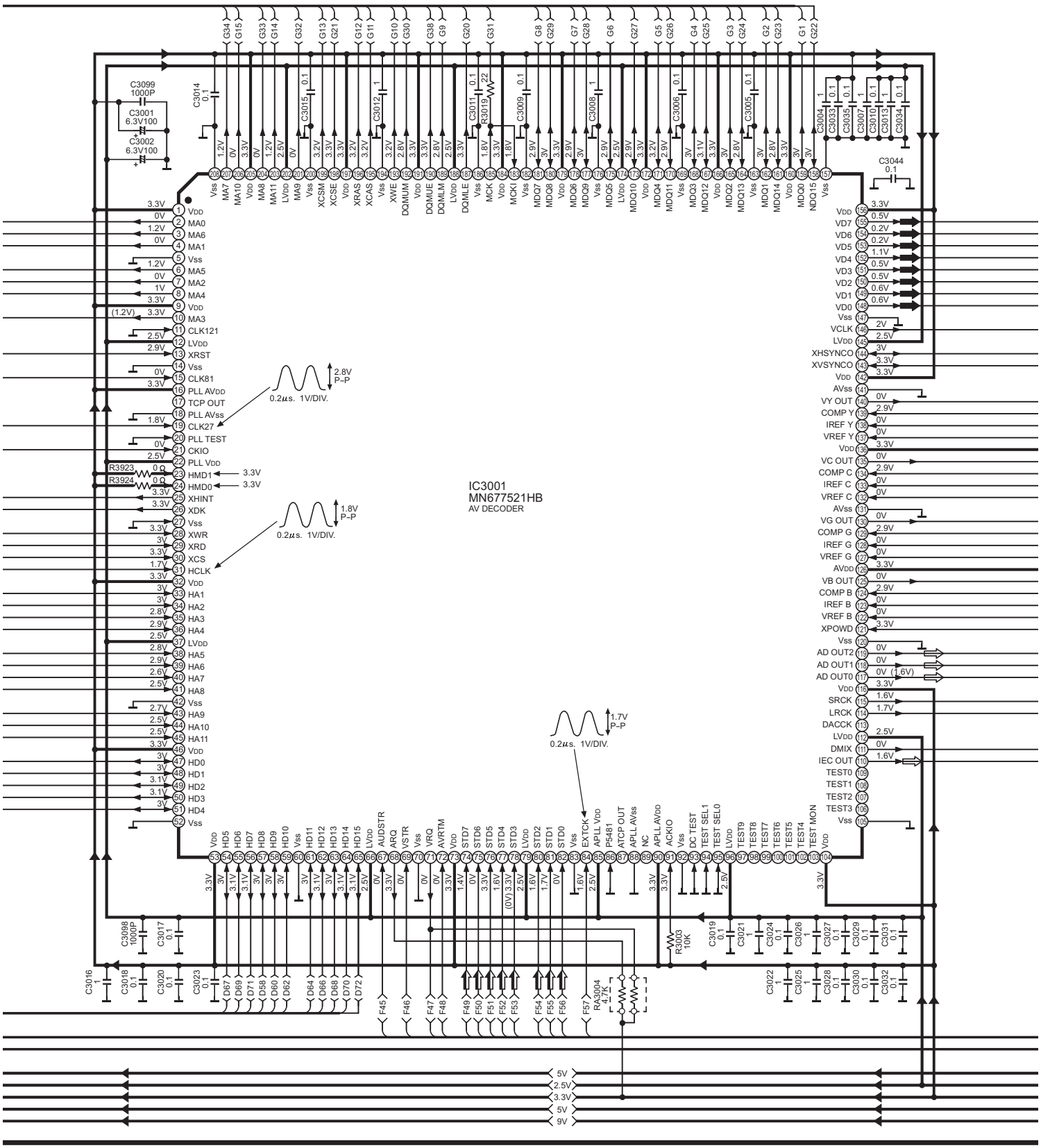
: POSITIVE VOLTAGE LINE



SCHEMATIC DIAGRAM-9

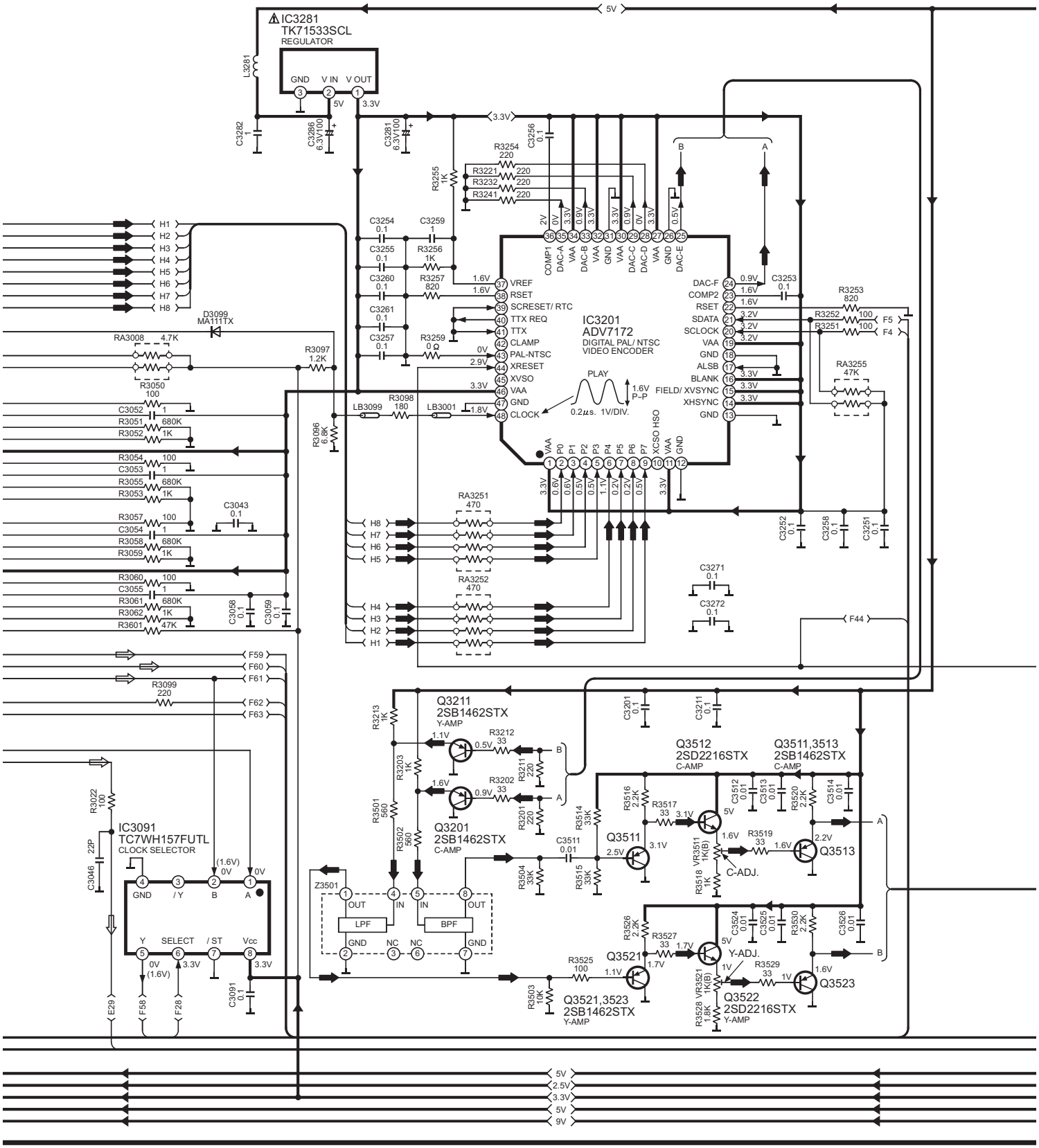
B DVD MODULE(1) CIRCUIT

: POSITIVE VOLTAGE LINE
: VIDEO / AUDIO SIGNAL LINE
: VIDEO SIGNAL LINE
: AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM–10

: AUDIO SIGNAL LINE
: POSITIVE VOLTAGE LINE
: VIDEO SIGNAL LINE



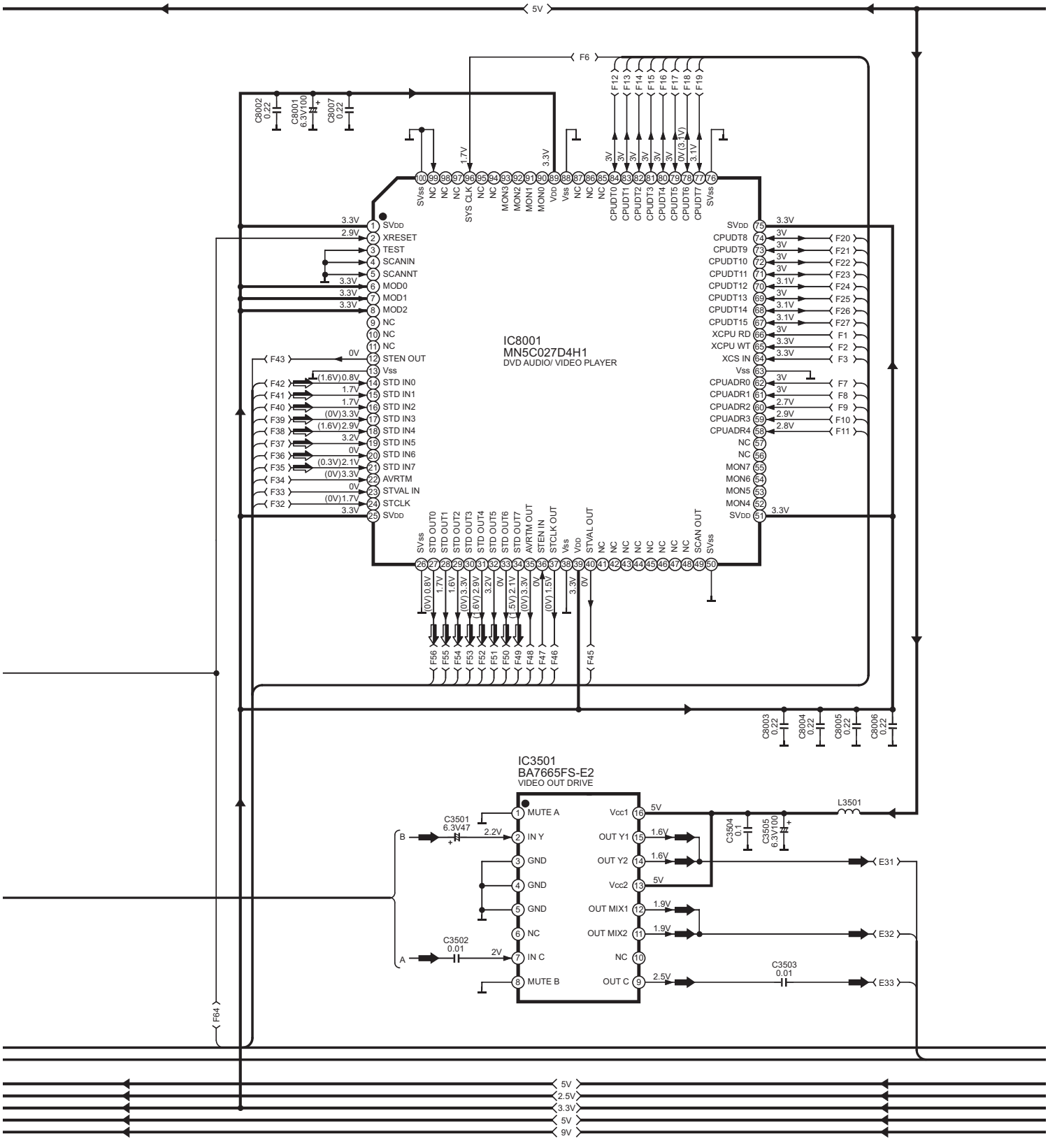
SCHEMATIC DIAGRAM-11

B DVD MODULE(1) CIRCUIT

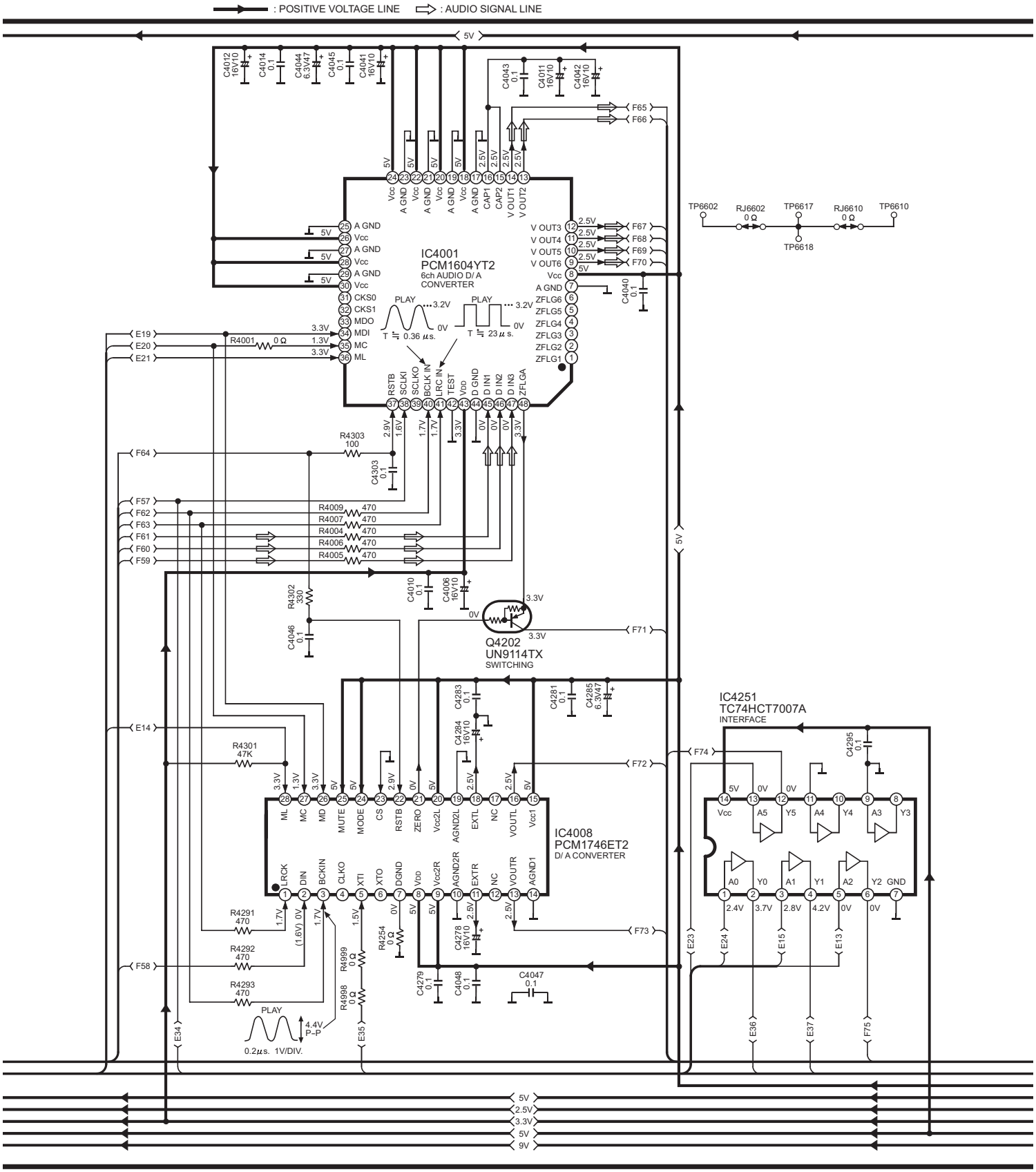
: POSITIVE VOLTAGE LINE

: VIDEO SIGNAL LINE

: VIDEO / AUDIO SIGNAL LINE


5V
F6
C8002 0.22
C8001 6.3V100
C8007 0.22
F12 F13 F14 F15 F16 F17 F18 F19
IC8001
MN5C027D4H1
DVD AUDIO/ VIDEO PLAYER
SVDD XRESET TEST SCANIN SCANNT MOD0 MOD1 MOD2 NC NC NC STEN OUT Vss STD IN0 STD IN1 STD IN2 STD IN3 STD IN4 STD IN5 STD IN6 STD IN7 AVRTM STVAL IN STCLK SVDD
SVss NC NC NC SYS CLK NC NC MON3 MON2 MON1 MON0 VDD Vss NC NC NC CPUDT0 CPUDT1 CPUDT2 CPUDT3 CPUDT4 CPUDT5 CPUDT6 CPUDT7 SVss
SVDD CPUDT8 CPUDT9 CPUDT10 CPUDT11 CPUDT12 CPUDT13 CPUDT14 CPUDT15 XCPU RD XCPU WT XCS IN Vss CPUADR0 CPUADR1 CPUADR2 CPUADR3 CPUADR4 NC NC MON7 MON6 MON5 MON4 SVDD
SVss STD OUT0 STD OUT1 STD OUT2 STD OUT3 STD OUT4 STD OUT5 STD OUT6 STD OUT7 AVRTM OUT STEN IN STCLK OUT Vss VDD STVAL OUT NC NC NC NC NC NC NC SCAN OUT SVss
C8003 0.22
C8004 0.22
C8005 0.22
C8006 0.22
IC3501
BA7665FS-E2
VIDEO OUT DRIVE
MUTE A IN Y GND GND GND NC IN C MUTE B
Vcc1 OUT Y1 OUT Y2 Vcc2 OUT MIX1 OUT MIX2 NC OUT C
C3501 6.3V47
C3502 0.01
C3503 0.01
C3504 0.1
C3505 6.3V100
L3501
E31
E32
E33
F64
5V
2.5V
3.3V
5V
9V

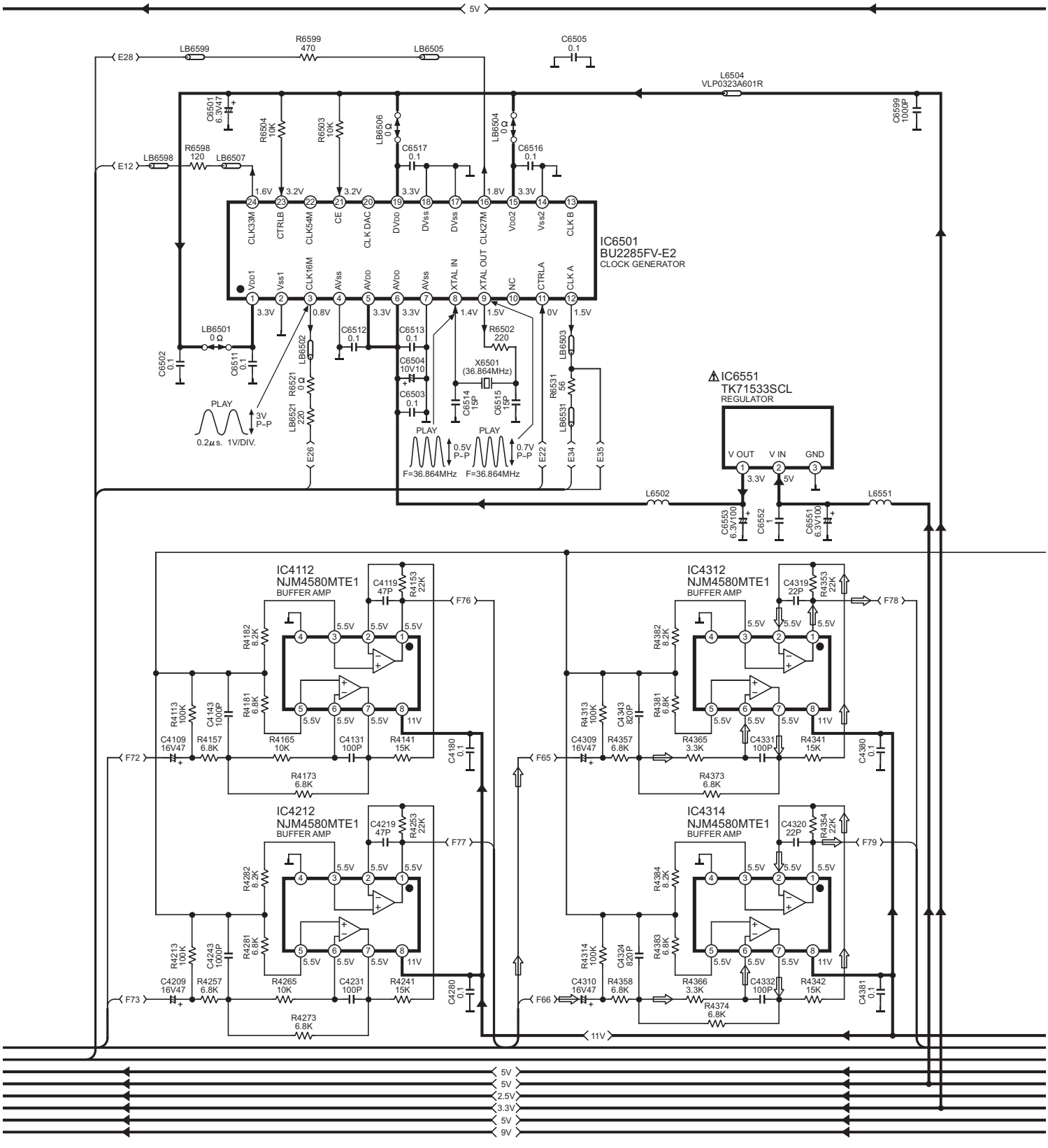
SCHEMATIC DIAGRAM–12



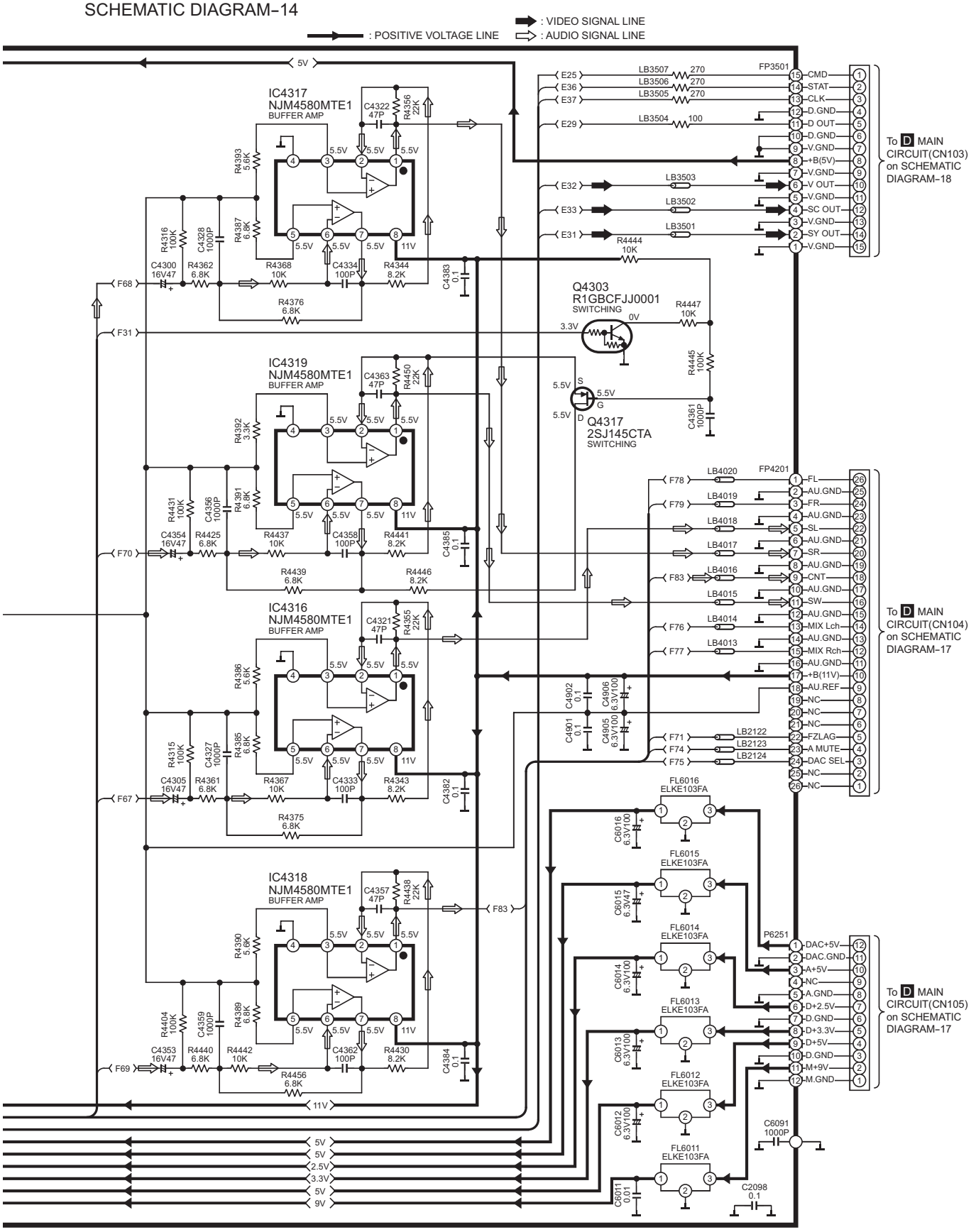
SCHEMATIC DIAGRAM-13

B DVD MODULE(1) CIRCUIT

: POSITIVE VOLTAGE LINE : AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM–14



The retention period of availability is dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

Ref.No.	Change of Part No.		Part Name & Description	Remarks
	SL-HDA710(E)	SL-HDA710(PP)		
CABINET AND CHASSIS				
4	REZ1308	REZ1352	FFC (15P)	
5	REZ1309	REZ1353	FFC (26P)	
13	RGG0175C-N	RGG0175B-N1	AL PANEL	
20-1	RGL0495-Q	------	TRAY INDICATOR	Deletion
20-2	VGB0527-1	------	DVD BADGE	Deletion
20-3	XQN26+AJ6FZ	------	SCREW	Deletion
27	RYQ0313A-K	RYQ0313B-K	REAR COVER	
105	RME0063-1	RME0063	LOCK LEVER SPRING	
120	RMR1301-W	RMR1301-K	MAGNET HOLDER	
CAPACITOR(S)				
C150	ECA1EAM102B	ECA1EM472	25V 1000 μF	
C2064	ECUZNC104ZFV	------	16V 0.1 μF	Deletion
INTEGRATED CIRCUIT				
IC6501	BU2285FV-E2	BU2285FV	IC	
COIL				
LB468-70	RLBN102V-Y	J0JCC0000109	COIL	
PRINTED CIRCUIT BOARD(S)				
PCB3	REP2990BA-S	REP2990CA-S	MAIN P.C.B.	<RTL>
PCB4	REP2989AB-N	REP2989BB-N	DVD MODULE P.C.B.	<RTL>
RESISTOR(S)				
R101	ERQ16NKWR10E	ERQ16NKWR33E	1/6W 0.33	⚠
R243	ERJ6GEYJ182V	ERJ6GEYJ821V	1/10W 820	
R4996	------	ERJ3GEY0R00V	1/16W 0	Addition
R4998	------	ERJ3GEY0R00V	1/16W 0	Addition
CHIP JUMPER				
RJ6602	------	ERJ3GEY0R00V	1/16W 0	

Printed in Japan / H000900000 KA/HH

ORDER NO.AD0008146C2

Service Manual

DVD Audio/Video Player

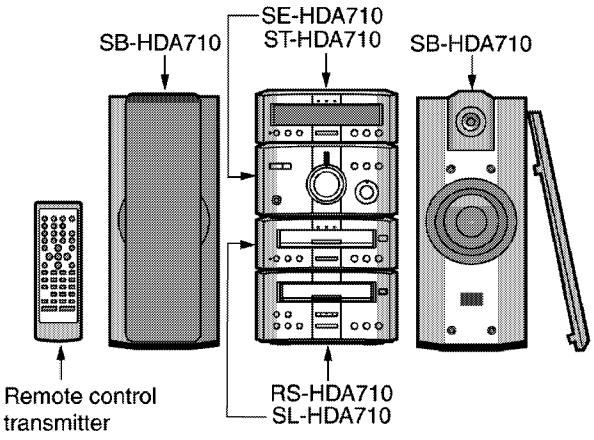
SL-HDA710

Traverse Deck : RAY0203-M Mechanism Series Colour (N).....Gold Type

Area

E.....Europe.

System:SC-HDA710



Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

Note: Refer to the service manual for Model No.SE-HDA710 (ORDER NO.AD0008145C2) for information on “ACCESSORIES” and “PACKAGING”.

Specification

●Disc played	
DVD-AUDIO/ VIDEO disc	$^{8}/_{12}$ cm single-sided, single-layer $^{8}/_{12}$ cm single-sided, double-layer $^{8}/_{12}$ cm double-sided, double-layer (one layer perside)
CD (CD-DA, VIDEO-CD)	$^{8}/_{12}$ cm discs
●Audio	
Number of channels	5.1 (FL, FR, SL, SR, C, SW)
Output level	1.7kΩ
Frequency response	
DVD-AUDIO 192kHz sampling	10-88kHz
CD-DA	10-20kHz
SN ratio	
DVD-AUDIO (mixed output)	110dB
Dynamic range	
DVD-AUDIO (mixed output)	100dB
●Video	
Signal system	PAL/ (PAL60/ NTSC)
Output level (75Ω)	
Composite video	1Vp-p
S-video Y	1Vp-p
S-video C	0.3Vp-p (PAL) 0.286Vp-p (NTSC)
●Digital output terminal	Optical×1
●Pick up wavelength	668nm
●General	
Dimensions (WxHxD):	196x76.8x293mm
Weight:	1.7kg
Power Supply[For (E) area only]:	DC13V/27V
Power Consumption:	27W

Notes:

1.Design and specifications are subject to change without notice.

2.Dimensions and weight are approximate.

●System/SC-HDA710

Tuner:ST-HDA710, **DVD Audio/ Video Player:SL-HDA710** , Amplifier:SE-HDA710, Cassette Deck:RS-HDA710, Speakers:SB-HDA710 (Made in MAES.)

Technics®

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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1 Before Repair

This equipment (SL-HDA710),which is the component of this system, is supplied with power from the amplifier (SE-HDA710) through the tuner (ST-HDA710). When repairing this equipment or checking operation of the system, be sure to connect the amplifierand tuner with it.

This equipment, even in the state of it as a single equipment, permits power supply and operation check. When operating it as a single equipment without the amplifier and tuner, refer to the paragraph of "Measurements and Adjustments.

2 Precaution of Laser Diode

CAUTION:

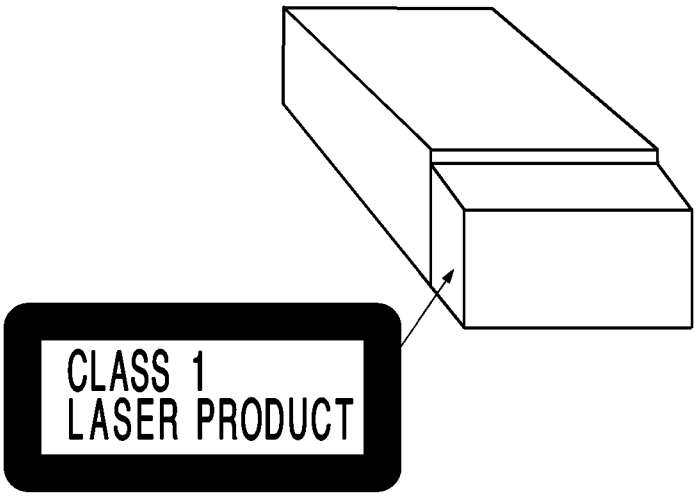
This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.
Wave length:780 nm
Maximum output radiation power from pickup: 100 µ W/VDE
Laser radiation from the pickup lens is safety level,but be sure the followings:

1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.

ACHTUNG:

Dieses Produkt enthält eine Laserdiode.
Im eingeschalteten Zustand wird unsichtbare Leserstrahlung von der Laserinheit adgestrahit.
Wellenlänge: 780 nm
Maximale Strahlungsleistung der Lasereinheit: 100 µ W/VDE
Die Strahlungan der Lasereinheit ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werkseitig justierten Einstellregler der Lasereinhit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlines blicken.
4. Nicht über längere Zeit in die Fokussierlines blicken.

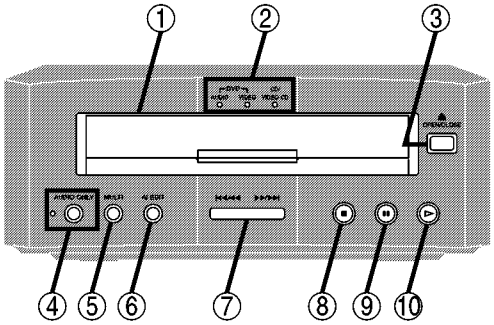


DANGER	INVISIBLE LASER RADIATION WHEN OPEN AVOID DIRECT EXPOSURE TO BEAM.
ADVARSEL	USYNLIG LASERSTRLING VED BNING, NR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDG UDS®TTELSE FOR STRLING .
VARO!	AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NKYMT...NT LASERSTEILYLLE . L KATSO STEESEEN.
VARNING	OSYNLIG LASERSTRLNING NR DENNA DEL R ...PPNAD OCH SPRREN R URKOPPLAD. BETRAKTA EJ STRLEN.
ADVARSEL	USYNLIG LASERSTRLING NR DEKSEL PNES OG SIKKERHEDSLS BRYTES. UNNG EKSPONERING FOR ST RLEN.
VORSICHT	UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GE...FFNET. NICHT DEM STRAHL AUSSETZEN.

LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT

CAUTION!
THIS PRODUCT UTILIZES A LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

3 Operating Instructions



① Disc tray
② Disc indicators
③ Disc tray open and close button (▲ OPEN/CLOSE)
④ Audio only button and indicator (AUDIO ONLY)
⑤ Multi button (MULTI)
⑥ AI edit button (AI EDIT)
⑦ Skip/search buttons (|◀◀ / ◀◀ , ▶▶ / ▶▶|)
⑧ Stop button (■)
⑨ Pause button (▮▮)
⑩ Play button and indicator (▷)
The color of the indicator depends on the operation taking place.
If stopped: orange
If playing: green

4 Handling Precautions for Traverse Deck

The laser diode in the traverse deck (optical pickup) may break down due to potential difference caused by static electricity of clothes or human body.So, be careful of electrostatic breakdown during repair of the traverse deck (optical pickup).

4.1. Handling of traverse deck (optical pickup)

1. Do not subject the optical pickup to static electricity as it is extremely sensitive to electrical shock.
2. To prevent the breakdown of the laser diode, an antistatic shorting pin is inserted into the flexible board (FPC board). When removing or connecting the short-pin, finish the job in as short time as possible.

   To connect to the PC board, be sure to open by removing the solder build-up, and finish the work quickly.
3. Take care not to apply excessive stress to the flexible board (FFC).
4. Do not turn the variable resistor (laser power adjustment). It has already been adjusted.

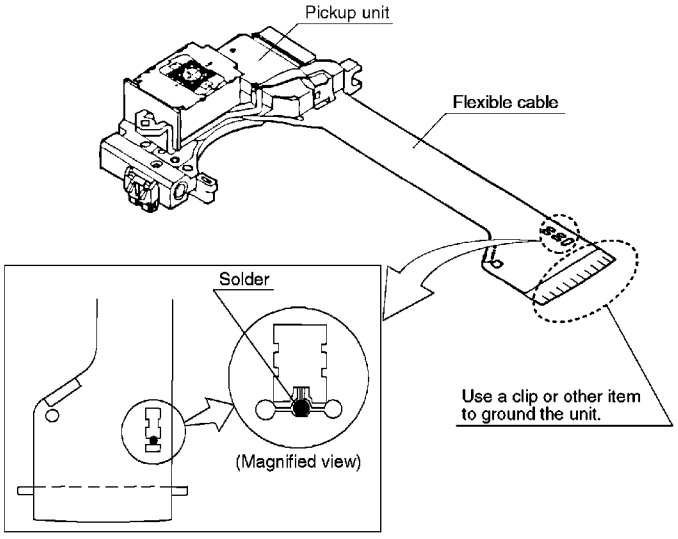


Fig. 1

4.2. Grounding for electrostatic breakdown prevention

1. Human body grounding

   Use the anti-static wrist strap to discharge the static electricity from your body. (As shown in Fig. 2 .)
2. Work table grounding

   Put a conductive material (sheet) or steel sheet on the area where the optical pickup is placed, and ground the sheet.

Caution:

The static electricity of your clothes will not be grounded through the wrist strap. So, take care not to let your clothes touch the traverse deck (optical pickup).

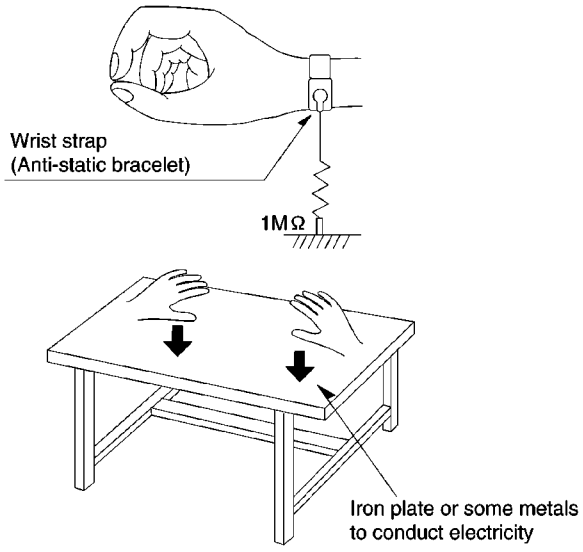


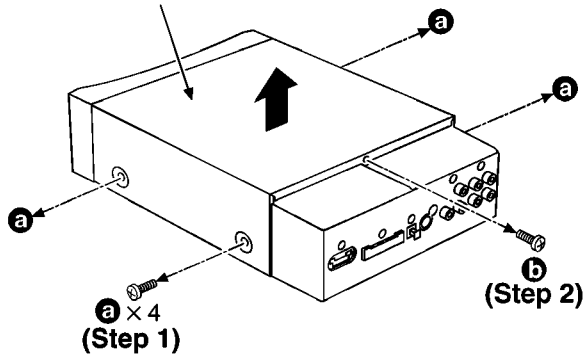
Fig. 2

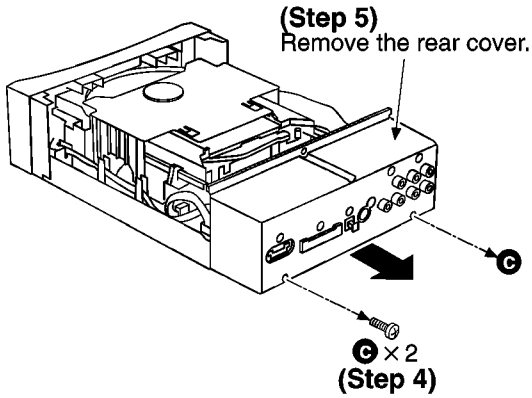
5 Operation Checks and Component Replacement Procedures

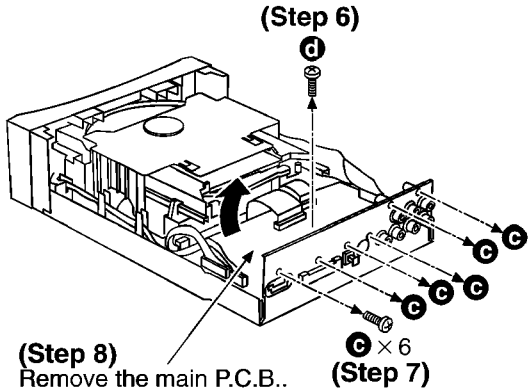
- **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
- **For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.**

5.1. Checking for the main P.C.B.

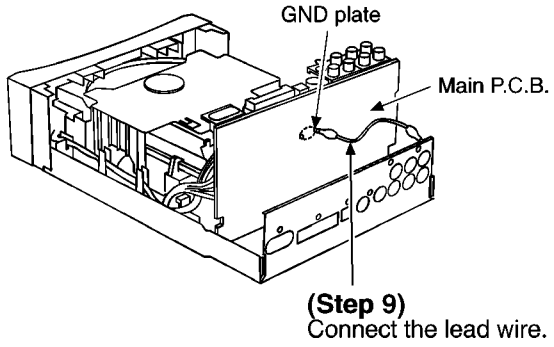
(Step 3)
Remove the top cabinet.





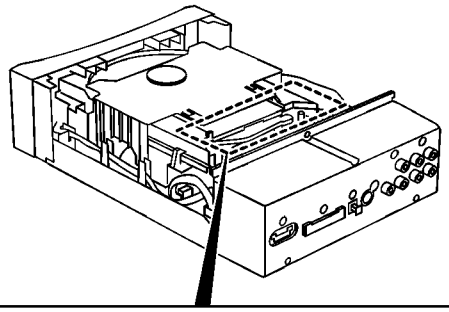


- **Check the main P.C.B. as shown below.**

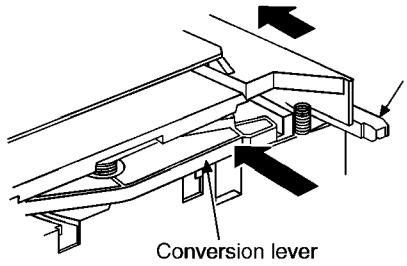


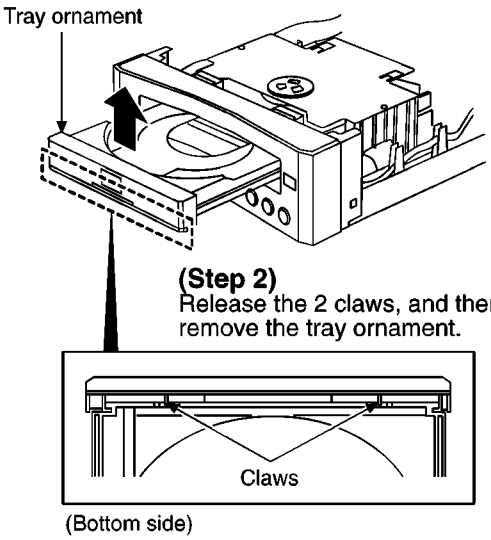
5.2. Checking for the DVD module (2) P.C.B.

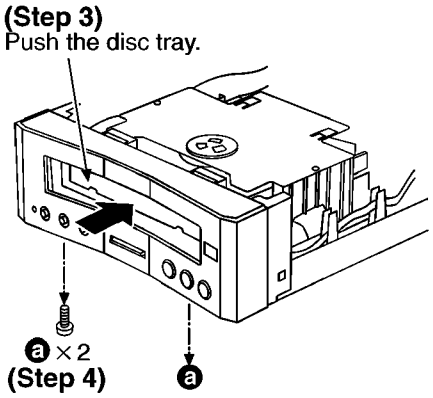
- Follow the **(Step 1)** - **(Step 3)** of item 5.1.

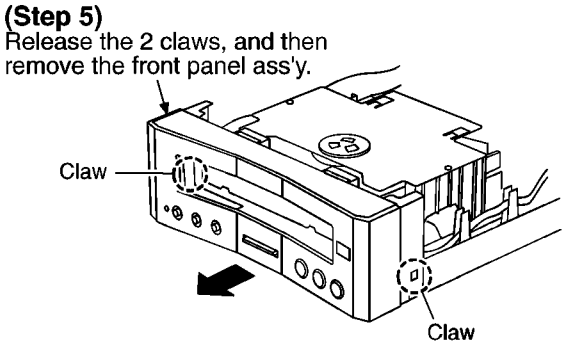


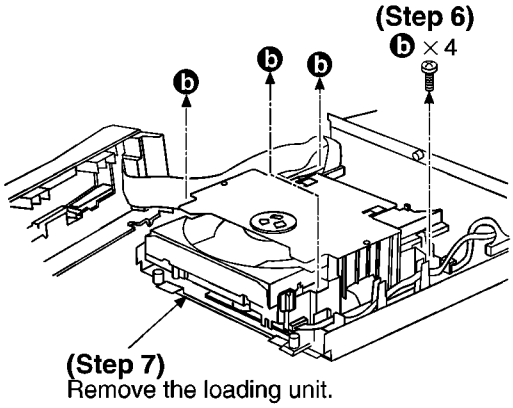
(Step 1)
Push the conversion lever, and then release disc tray.
Then pull out the disc tray.



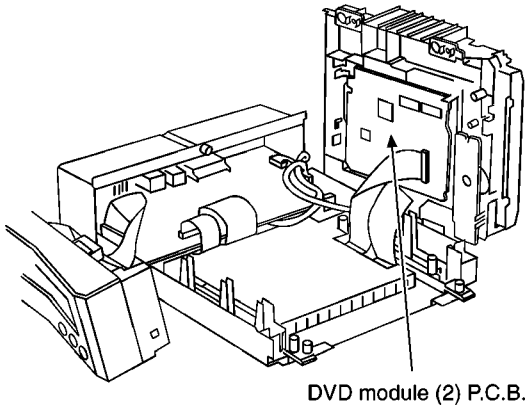








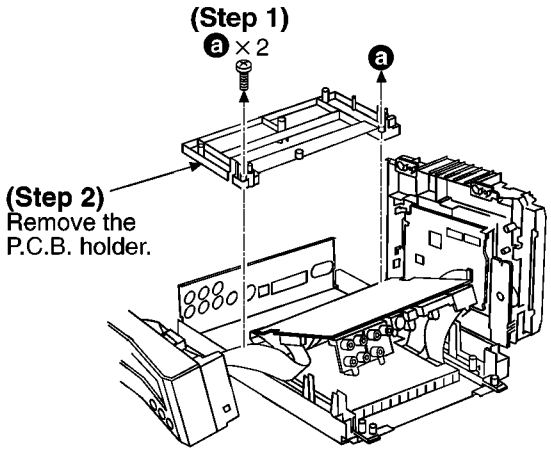
· **Check the DVD module (2) P.C.B. as shown below.**

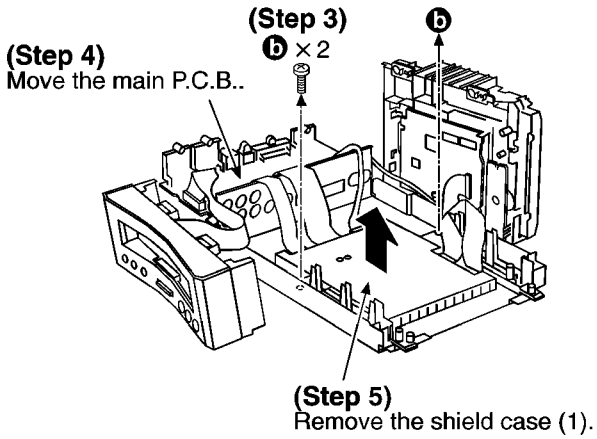


5.3. Checking for the DVD module (1) P.C.B.

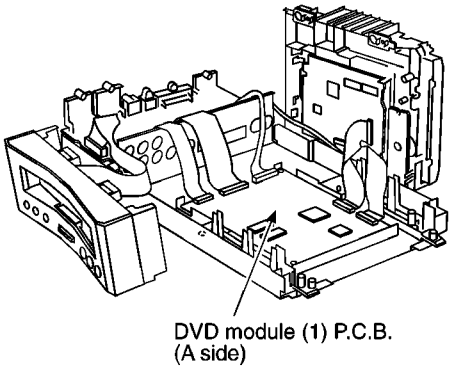
· Follow the **(Step 1)** - **(Step 8)** of item 5.1.

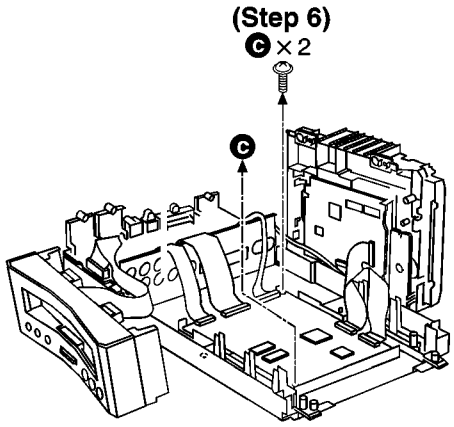
· Follow the **(Step 1)** - **(Step 7)** of item 5.2.



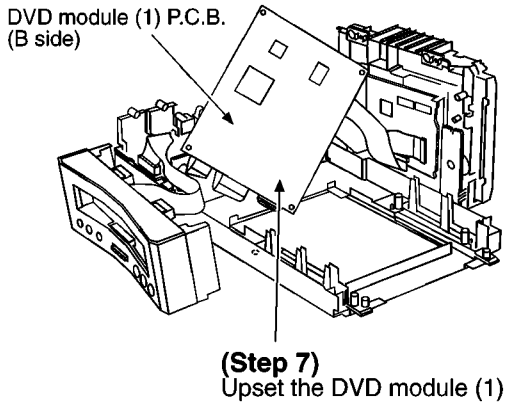


· **Check the DVD module (1) P.C.B. (A side) as shown below.**





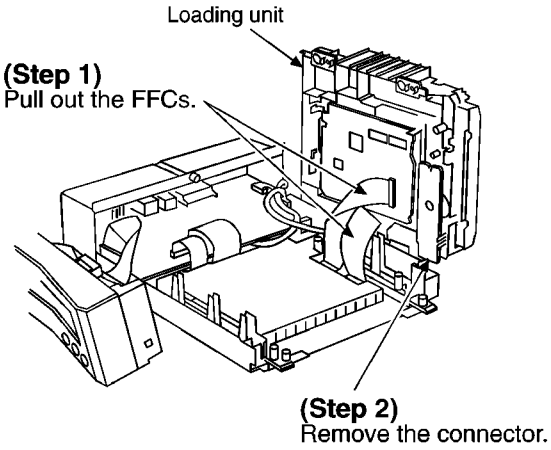
· **Check the DVD module (1) P.C.B. (B side) as shown below.**

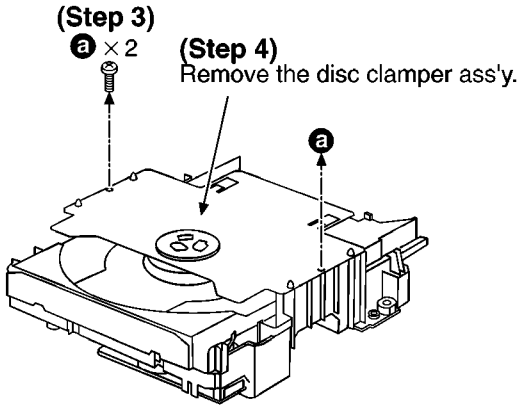


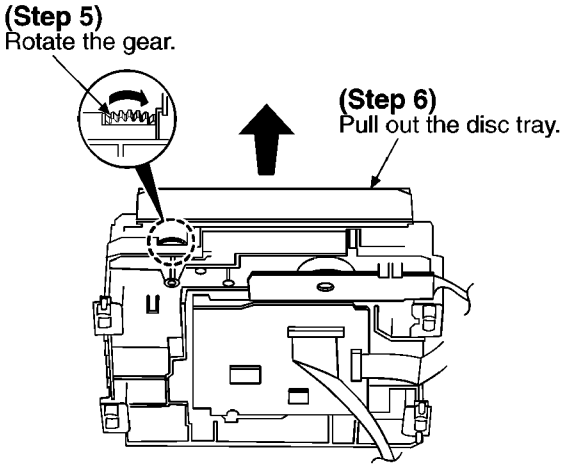
5.4. Replacement for the traverse deck ass'y

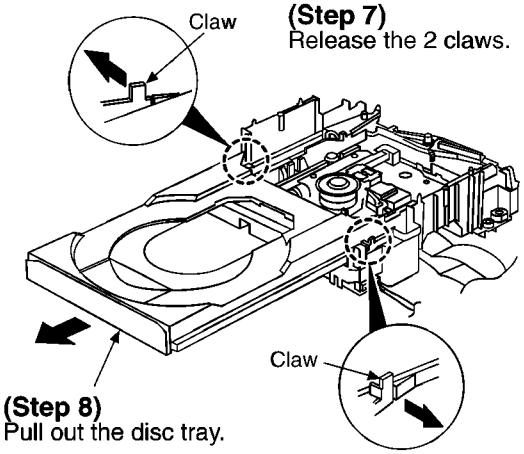
· Follow the **(Step 1)** - **(Step 3)** of item 5.1.

· Follow the **(Step 1)** - **(Step 7)** of item 5.2.





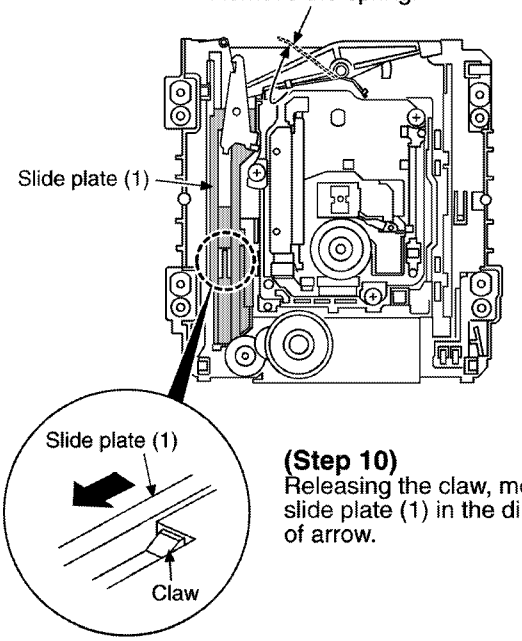




(Step 7)
Release the 2 claws.

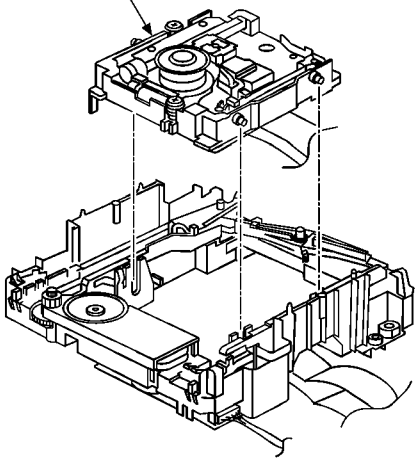
(Step 8)
Pull out the disc tray.

(Step 9)
Remove the spring.



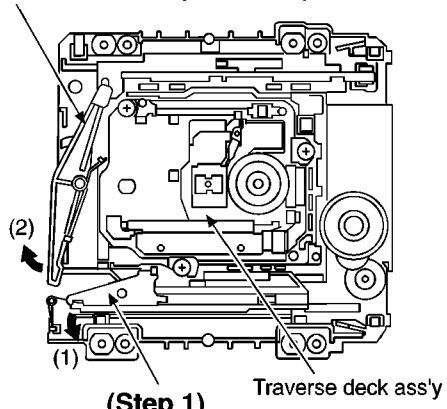
(Step 10)
Releasing the claw, move the slide plate (1) in the direction of arrow.

(Step 11)
Remove the traverse deck ass'y.

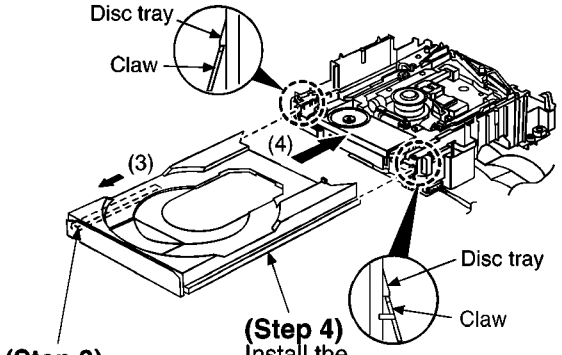


Installation of the disc tray after replacement

(Step 2)
Operate the conversion lever, and then locate the traverse deck ass'y to "UP" position.



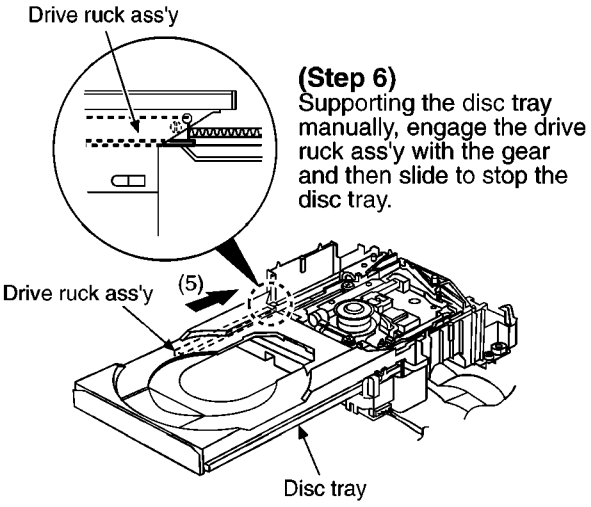
(Step 1)
Release the lock lever.



(Step 3)
Move the drive ruck ass'y in the direction of arrow (3).

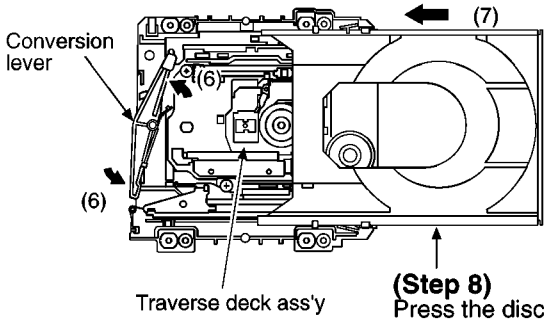
(Step 4)
Install the disc tray.

(Step 5)
Latch the claw to the disc tray.



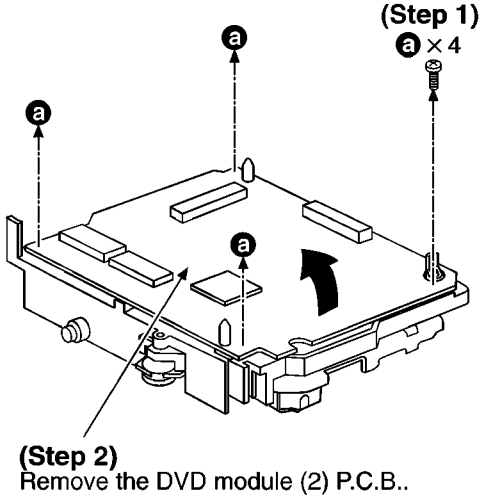
(Step 6)
Supporting the disc tray manually, engage the drive ruck ass'y with the gear and then slide to stop the disc tray.

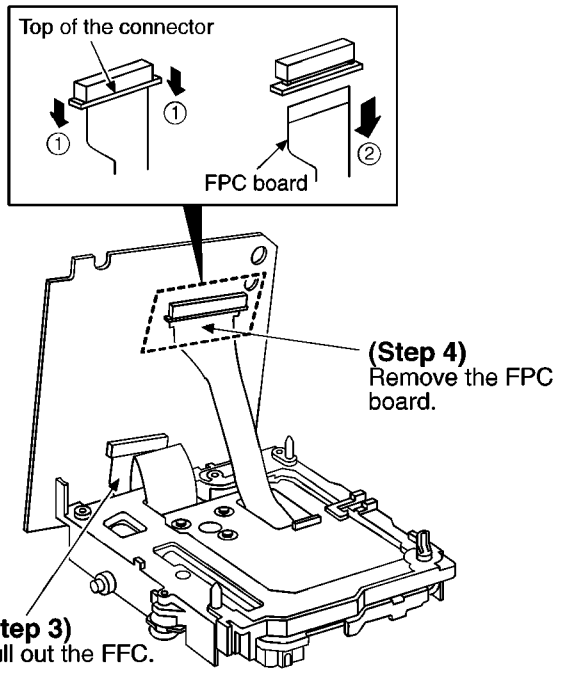
(Step 7)
Operate the conversion lever, and then locate the traverse deck to "DOWN" position.



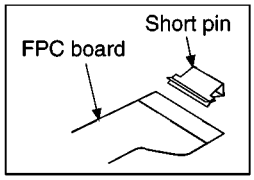
5.5. Replacement for the traverse motor ass'y, optical pickup and spindle motor ass'y

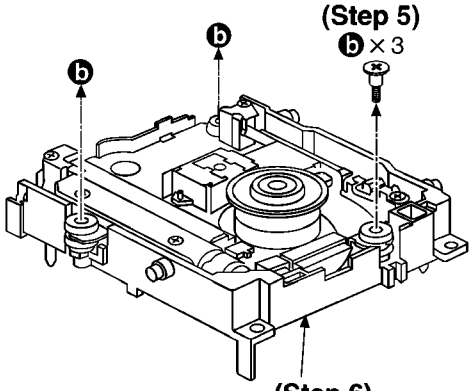
- Follow the **(Step 1)** - **(Step 3)** of item 5.1.
- Follow the **(Step 1)** - **(Step 7)** of item 5.2.
- Follow the **(Step 1)** - **(Step 11)** of item 5.4.

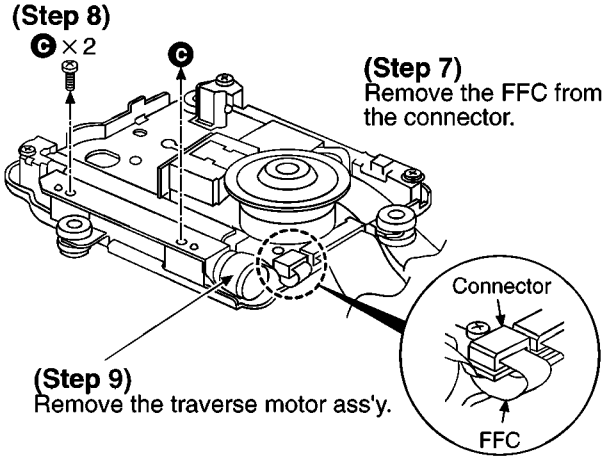




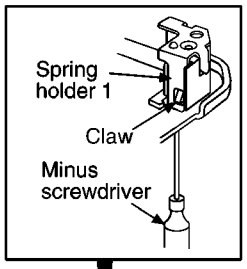
Caution:
Insert short pin into the traverse unit FPC board.
(Refer to "**Handling Precautions for Traverse Deck**".)

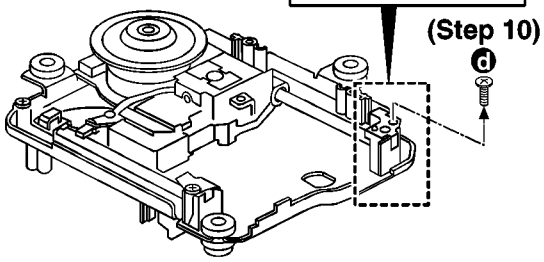






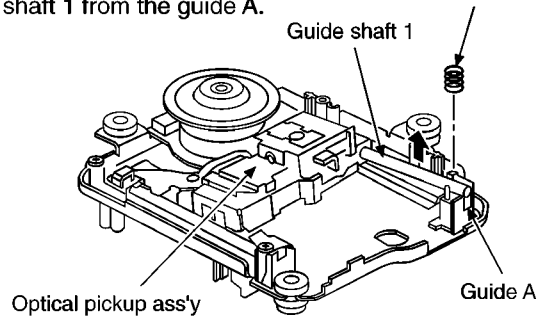
(Step 11)
Release the claw, and then remove the spring holder 1.





(Step 13)
Lift up the optical pickup ass'y. and then remove the guide shaft 1 from the guide A.

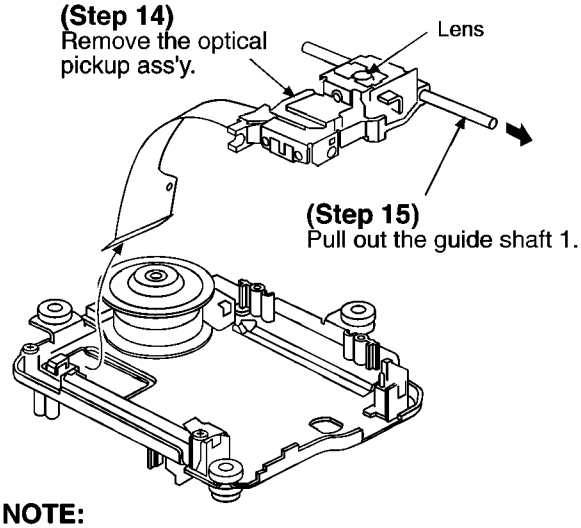
(Step 12)
Remove the spring.



NOTE:
Take care not to lose the spring.

(Step 14)
Remove the optical pickup ass'y.

(Step 15)
Pull out the guide shaft 1.



NOTE:
1. Use care to prevent damage the optical pickup, due to the precision construction.
2. Do not touch the lens of the optical pickup.

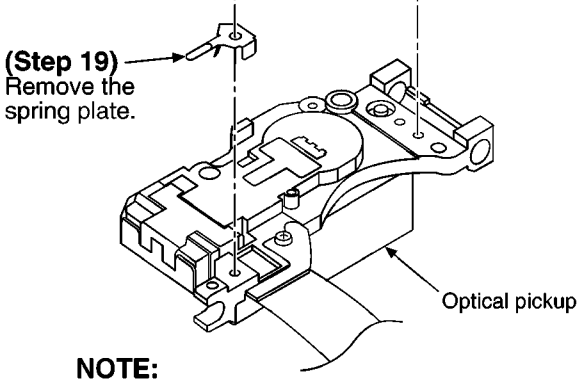
NOTE:
Handle the end of spring plate carefully to avoid deform.

(Step 16)
e

(Step 17)
Remove the nut unit.

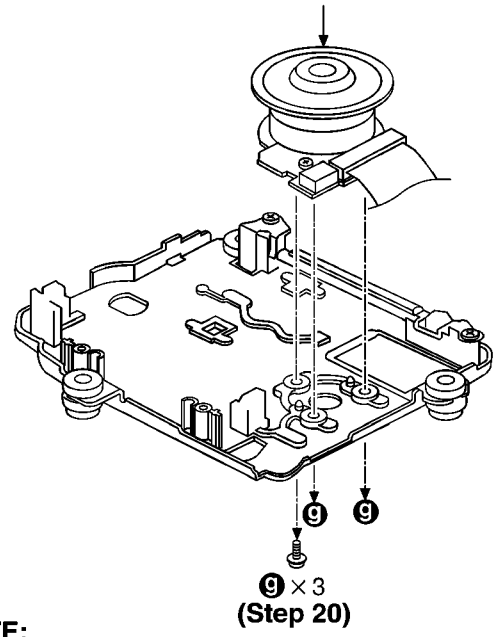
(Step 18)
f

(Step 19)
Remove the spring plate.



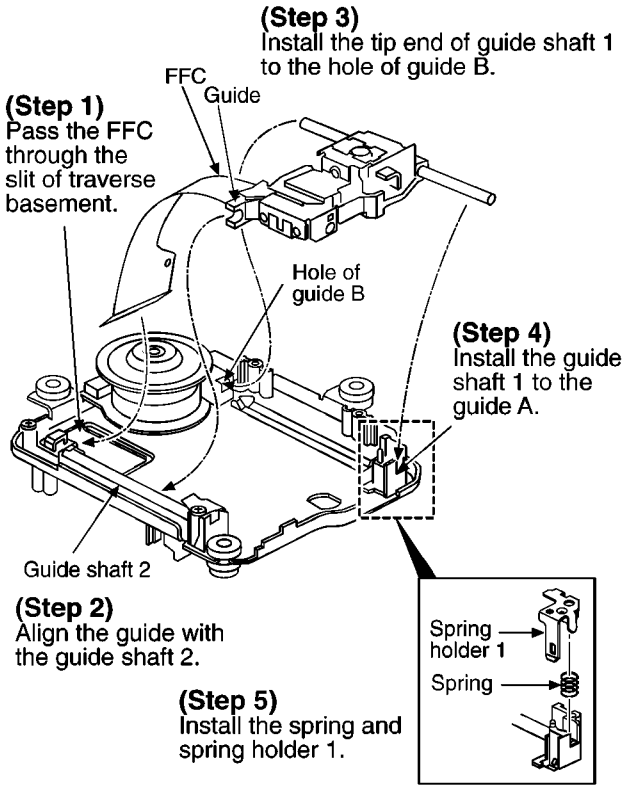
NOTE:
Tighten the screw, and then apply the locktite sealant.

(Step 21)
Remove the spindle motor ass'y.

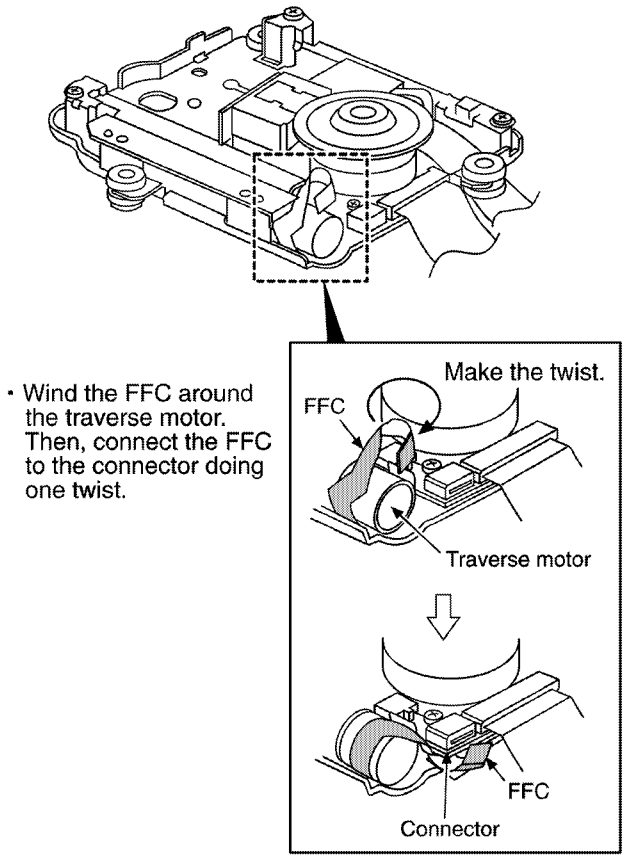


NOTE:
Tighten the screw, and then apply the locktite sealant.

Installing the optical pickup

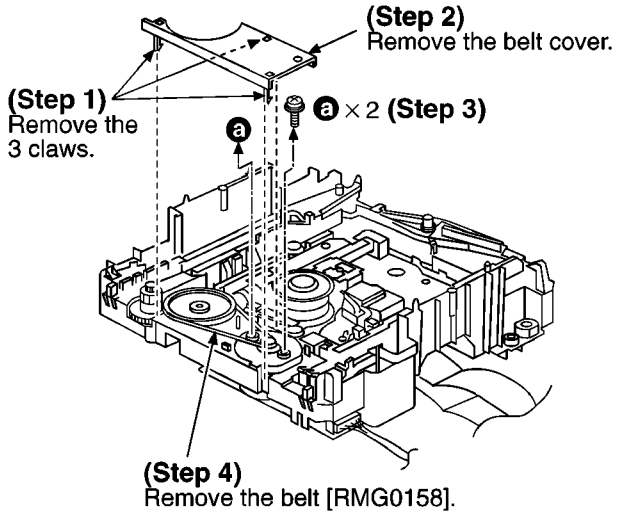

(Step 3)
Install the tip end of guide shaft 1 to the hole of guide B.
FFC
Guide
(Step 1)
Pass the FFC through the slit of traverse basement.
Hole of guide B
(Step 4)
Install the guide shaft 1 to the guide A.
Guide shaft 2
(Step 2)
Align the guide with the guide shaft 2.
(Step 5)
Install the spring and spring holder 1.
Spring holder 1
Spring

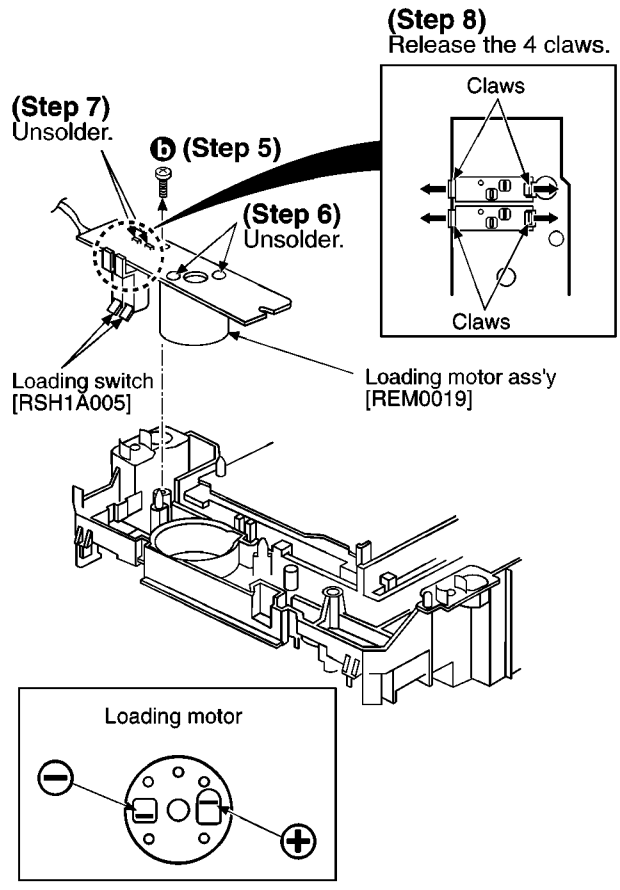
Installing the traverse motor ass'y


• Wind the FFC around the traverse motor. Then, connect the FFC to the connector doing one twist.
Make the twist.
FFC
Traverse motor
FFC
Connector

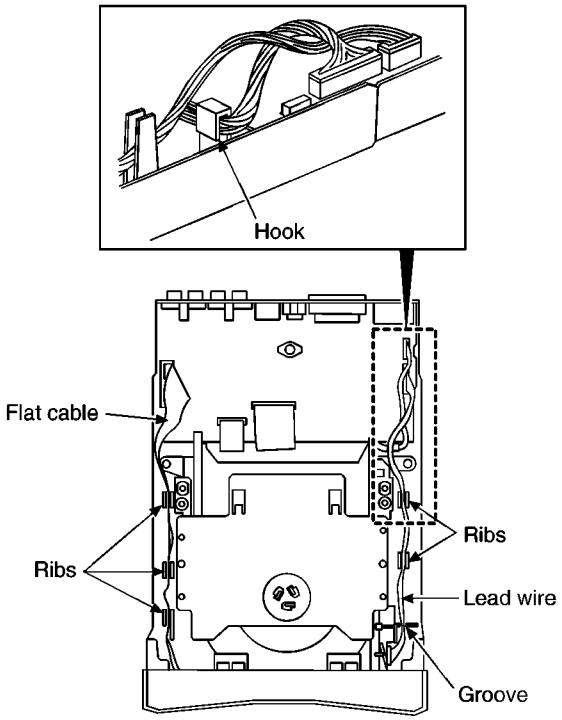
5.6. Replacement for the belt, loading motor ass'y and loading switch

- Follow the **(Step 1)** - **(Step 3)** of item 5.1.
- Follow the **(Step 1)** - **(Step 7)** of item 5.2.
- Follow the **(Step 1)** - **(Step 8)** of item 5.4.





5.7. Lead wire and flat cable arrangement



6 Optical Pickup Self-Diagnosis and Replacement Procedure

The optical pickup self-diagnosis function and tilt adjustment check function have been newly added to this player. When repairing, use the following procedure for effective Self-diagnosis and tilt adjustment.

Be sure to use the self-diagnosis function before replacing the optical pickup when "NO DISC" is displayed. As a guideline, you should replace the optical pickup when the value of the laser drive current is more than 50.

Note

Press the power button to turn on the power, and check the value before the unit warms up (within three minutes).

•Use the self diagnosis function below when NO DISC is displayed or unit doesn't read a disc, before replacing the OPU.

"NO DISC" is displayed, unit does not play smoothly, etc.

↓

Check the laser drive current.

Value is more than 50 ↓

Value is 50 or less →

"Operation checks and Component Replacement Procedures"

↓

Check the laser drive current after replacement.
• Write the present value into the unit if it is 40 or less.

↓

Do the optical pickup tilt adjustment.
(Refer to "Optical Pickup Tilt Adjustment".)

↓

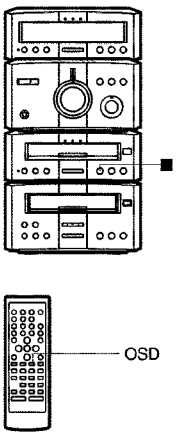
Initialize the player.
Press "≧10!"#" button on the remote controller while pressing "■" button on the player.

↓

End

• Use the optical pickup self-diagnosis function.

method: With no disc in the player:
• Press "OSD" button on the remote control unit while pressing ■ button on the player.



Display content
LD OOO OOO
Factory preset value
Present value

Replace with a new optical pickup if the present value is more than 40.
Cause:
Damage due to static electricity during replacement.

method: With no disc in the player:
• Press the "OSD" button on the remote control unit while pressing the "STOP" button on the player.

• Write the present value into the player if it is 40 or less.

Writing method:
• Press the "PAUSE" button on the remote control unit while pressing the "STOP" button on the player.

7 Self-Diagnosis Function and Service Modes

7.1. Service Mode Table

The service modes can be activated by pressing various button combinations on the player and remote control unit.

Player buttons	Remote control unit buttons	Application	Note
■	0	Displaying the UHF display DVD F_ _ _	Refer to "Self-Diagnosis Function (UHF Display)".
	5	Tilt adjustment	Refer to "Optical Pickup Tilt Adjustment".
	6	Checking the region numbers and broadcast system	
	7	Checking the program version	Check the IC6302 FLASH ROM program.
	OSD	Checking the laser drive current	Refer to "Optical Pickup Self-Diagnosis and Replacement"
	≧ 10!"#	Initializing the DVD player (restoring factory preset settings) *Use when replaceing a microprocessor, microprocessor peripheral parts, or P.C.B.	

7.2. Self-Diagnosis Function (UHF Display)

This unit incorporates a convenient self-diagnosis function for use in troubleshooting.

Display method	Display	Diagnosis	Checkpoints
Service numbers displayed during use	DVD U11	Focus error	IC2001,IC2511,IC5201,pickup
	DVD H02	Spindle servo error	Spindle motor, IC2501, IC2001
	DVD H03	Traverse error	Stepping motor, IC2511, IC2001
	DVD H04	Tracking servo error	IC2001, IC2501, IC5201, pickup, disc
	DVD H05	Seek error	Stepping motor, IC2511, IC2001
Press the "0" button on the remote control unit while pressing the ■ button on the player.	DVD F0**	Disc format error	If this type of error occurs, refer to section 6.3, Examples of Repairs Using Error Codes.
	DVD F1**	Disc code error	
	DVD F4**	IIC BUS error	
	DVD F5**	DSC	
	DVD F6**	ECC error	
	DVD F7**	Microprocessor error	
	DVD F8**	Microprocessor error	

7.3. Examples of Repairs Using Error Codes

Refer to this section when carrying out repairs.

Error display	Malfunction example
F0**	Disc, IC7001
F103	Disc, IC7001
F4FF	IC6001
F500	Optical pickup, IC2001, IC5201, IC2511, IC2501
F501	IC2001, IC6201
F502	IC2501, IC2511, IC2001, IC5202
F504	IC5202, IC2001
F505	Disc, IC2501, IC2511, IC5202,IC2001
F506	Disc, Optical pickup, IC2001
F600	Disc, IC7001, IC5202, IC2001
F601	Disc, IC7001
F602	Disc, IC5202, IC2001
F603	Disc, IC5202, IC2001
F610	IC7001
F611	IC7001, IC5202, IC2001
F612	IC7001, IC5202, IC2001
F620	Laser drive circuit
F621	Laserdrive circuit
F700	IC6201
F701	IC6201
F702	IC6201
F880	IC6201
F890	IC6201
F891	IC6201
F8A0	IC6201
F893	IC6302
F894	IC6303

7.4. Sales Demonstration Lock Function

The device, which prevents a loaded disc from being taken out of the set, is used for prevention of loss of discs during a period of window display of merchandise, etc..

When you try to operate the set then, an indication of LOCKED will be shown on the set and no operation will be practicable. With this model, either Lock Mode A or Lock Mode B can be selected.

7.4.1. Setting Method

Lock Mode A: Set the POWER switch to ON and set the selector to DVD. While pushing the STOP button of the DVD, press the remote control PLAY button for 3 seconds. Then the LOCK function works. (When the LOCK function is ON, LOCKED is displayed for3 seconds and the set begins playing the loaded disc.)

*When in the Lock Mode A, the OPEN/CLOSE button is prevented from working.

Lock Mode B: Set the POWER switch to ON and set the selector to DVD. While pushing the PLAY button of the DVD, press the remote control PLAY button for 3 seconds. Then the LOCK function works. (When the LOCK function is ON, LOCKED is displayed for3 seconds and the set begins playing the loaded disc.)

*When in the Lock Mode B, only the tone control button can work and other buttons are kept from working.

7.4.2. Release Method

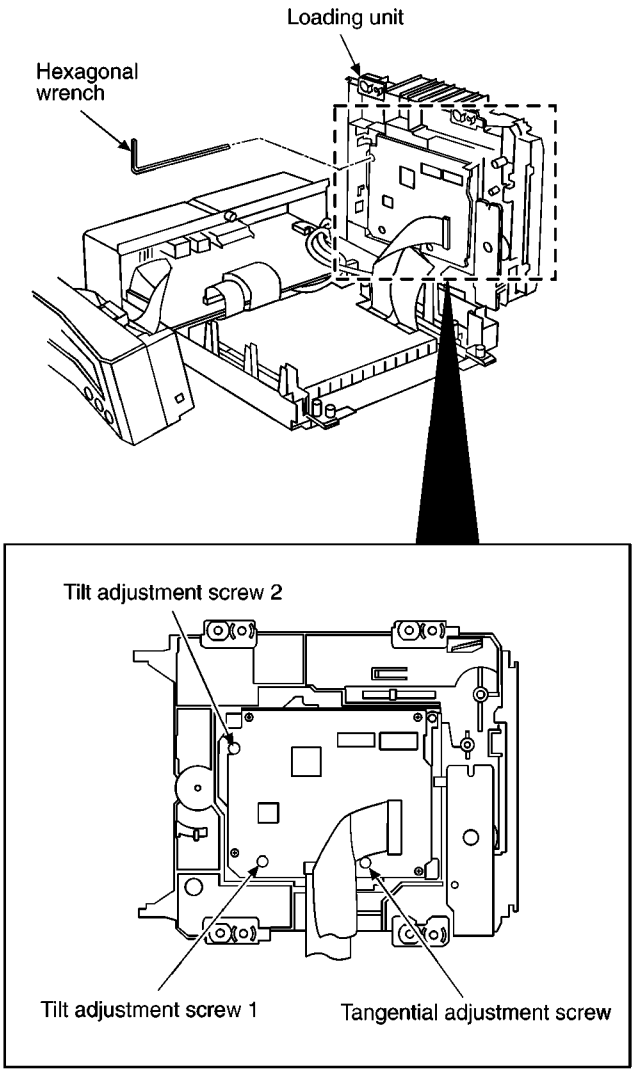
Either Lock Mode A or Lock Mode B can be cancelled by the same procedure as in setting. (Upon cancellation of the LOCK function, UNLOCKED will be displayed for 3 seconds.)

8 Optical Pickup Tilt Adjustment

8.1. Preparation for optical pickup dump adjustment

- Perform the procedure **(Step 1)** - **(Step 7)** in item 5.2. of "Operation Checks and Component Replacement Procedures".

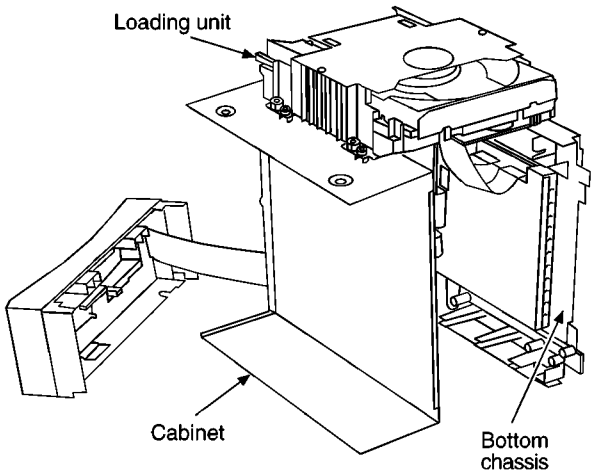
1. Insert the hexagonal wrench to the adjust screw.



2. Stand the bottom chassis as shown below.
3. Place the loading unit onto the cabinet and loading unit.

NOTE:

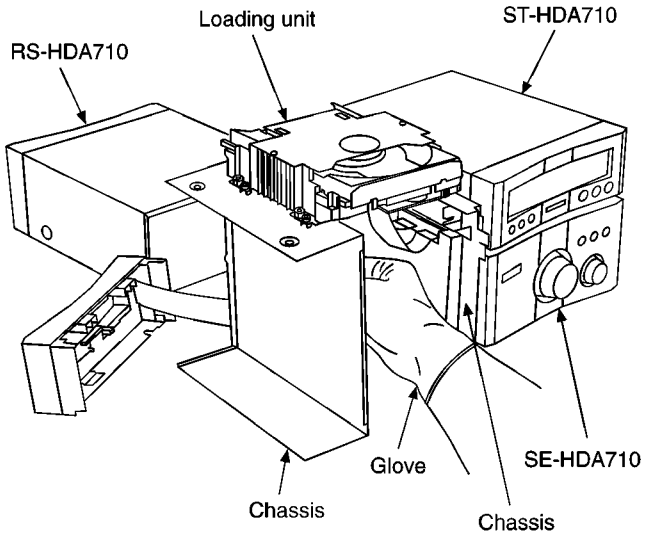
Take care not to fall down the loading unit under unstable adjusting condition.



4. Connect the unit to other units (ST-HDA710, SE-HDA710 and RS-HDA710) with cables.
5. Insert the hand into the unit to rotate the hexgonal screw for adjustment.

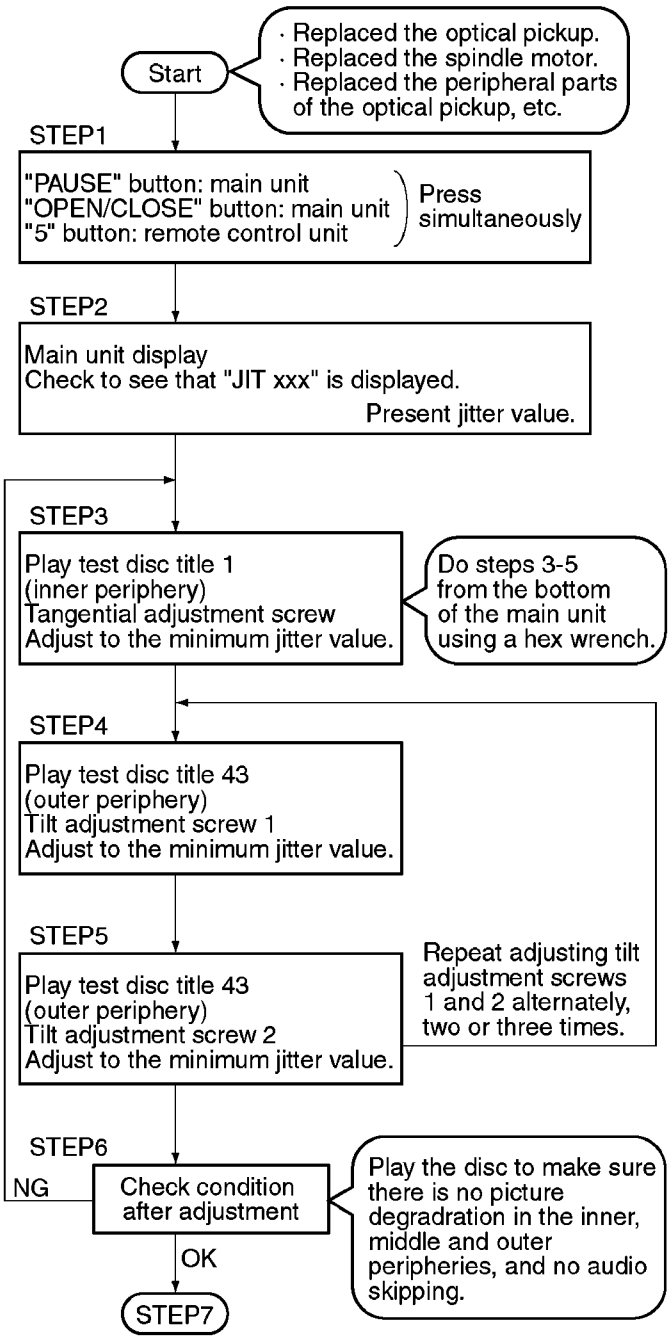
NOTE:

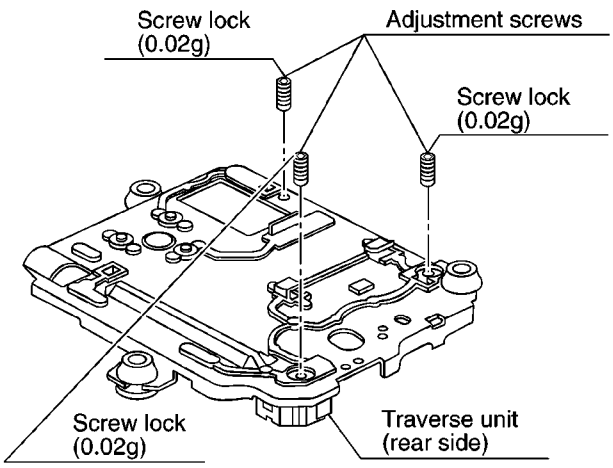
Use care in handing unit to avoid possible injury to hand from the edge of chassis.
Be sure to use the glove when servicing.

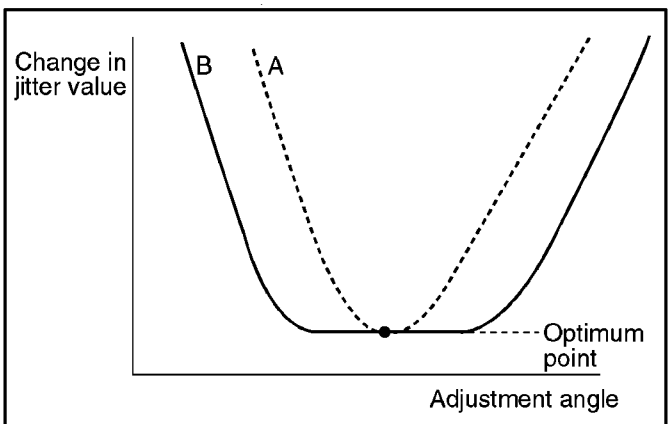


8.2. Optical Pickup Tilt Adjustment

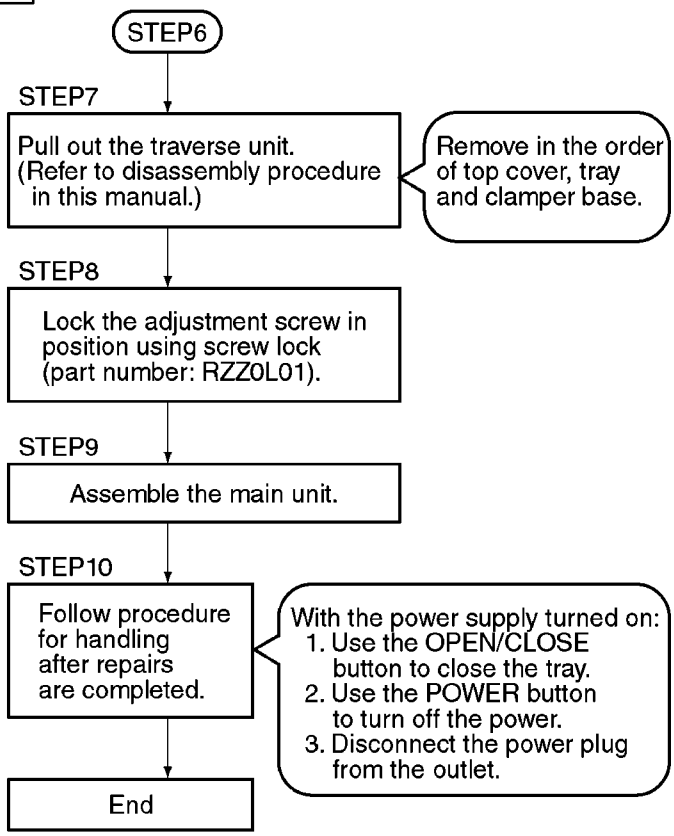
Measurement point	Adjustment point	Mode	Disc
Main unit service display	Tangential adjustment screw Tilt adjustment screw	T1 (inner periphery) play T43 (outer periphery) play	DVDT-S15 or DVDT-S01
Measuring equipment, tools		Adjustment value	
Hex wrench (part number: JGS0100) Screw lock (part number: RZZ0L01)		Adjust to the minimum jitter value.	


Start
· Replaced the optical pickup.
· Replaced the spindle motor.
· Replaced the peripheral parts of the optical pickup, etc.
STEP1
"PAUSE" button: main unit
"OPEN/CLOSE" button: main unit
"5" button: remote control unit
Press simultaneously
STEP2
Main unit display
Check to see that "JIT xxx" is displayed.
Present jitter value.
STEP3
Play test disc title 1
(inner periphery)
Tangential adjustment screw
Adjust to the minimum jitter value.
Do steps 3-5 from the bottom of the main unit using a hex wrench.
STEP4
Play test disc title 43
(outer periphery)
Tilt adjustment screw 1
Adjust to the minimum jitter value.
STEP5
Play test disc title 43
(outer periphery)
Tilt adjustment screw 2
Adjust to the minimum jitter value.
Repeat adjusting tilt adjustment screws 1 and 2 alternately, two or three times.
STEP6
NG
Check condition after adjustment
Play the disc to make sure there is no picture degradration in the inner, middle and outer peripheries, and no audio skipping.
OK
STEP7





· Jitter value depends on the model:
(1) If the jitter value changes like A, the optimum point is easy to find.
(2) If the jitter value changes like B, set the optimum point near the middle.


STEP6
STEP7
Pull out the traverse unit.
(Refer to disassembly procedure in this manual.)
Remove in the order of top cover, tray and clamper base.
STEP8
Lock the adjustment screw in position using screw lock (part number: RZZ0L01).
STEP9
Assemble the main unit.
STEP10
Follow procedure for handling after repairs are completed.
With the power supply turned on:
1. Use the OPEN/CLOSE button to close the tray.
2. Use the POWER button to turn off the power.
3. Disconnect the power plug from the outlet.
End

Notes

- Adjustment is generally unnecessary after replacing other parts of the traverse unit. However, adjust if there is a noticeable degradation in picture quality.
- Optical adjutments cannnot be made inside the optical pickup.
- Adjustment is generally unnecessary after replacing the traverse unit.

9 To Supply Power Source

Cautions:

- It is very dangerous to look at or touch the laser beam. (Laser radiation is invisible.)

  With the unit turned "on", laser radiation is emitted from the pickup lens.
- Avoid exposure to the lase beam, especially when performing adjustments.

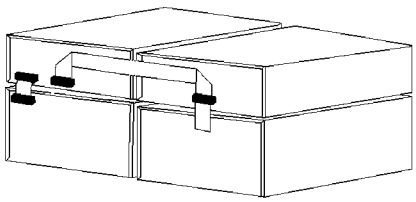


Fig. 3

This unit SL-HDA710 is designed to operate on power supplied from the system connected. (For system connection, refer to Fig. 3.)

When the unit SL-HDA710 has to test and service alone, use the following method to supply power source.

1. Shot JK104-3pin, JK104-6pin and JK104-17pin. (refer to Fig. 4)
2. Connect a DC power supply to JK104-5pin and JK104-1pin and Ⓐ .
   Then adjust the outputs to 10V for 5pin and 13V for 1pin (refer to Fig. 4 and Fig. 5)

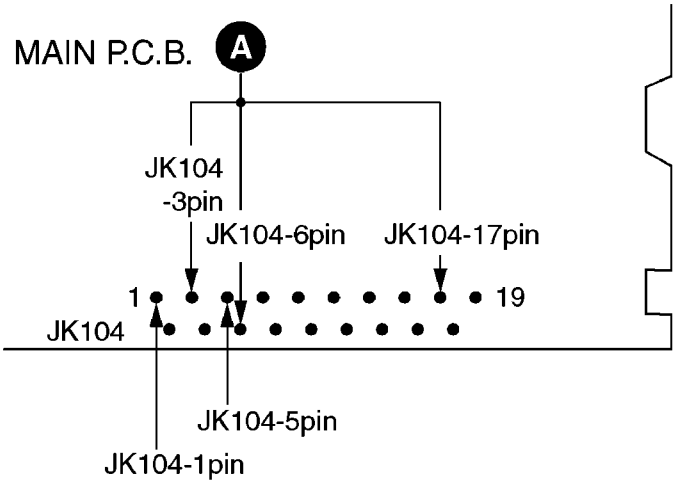


Fig. 4

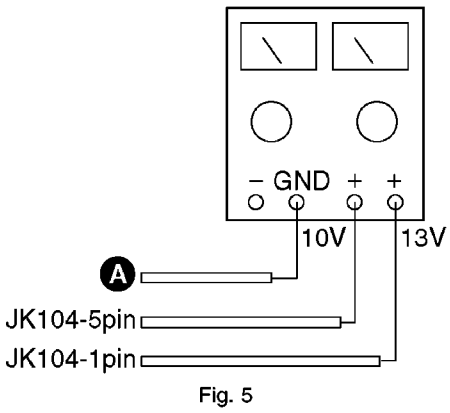


Fig. 5

Note:

Use only this method when checking the voltage etc..

In case of checking operations, use the system connections to supply power source.

10 Electrical Adjustment

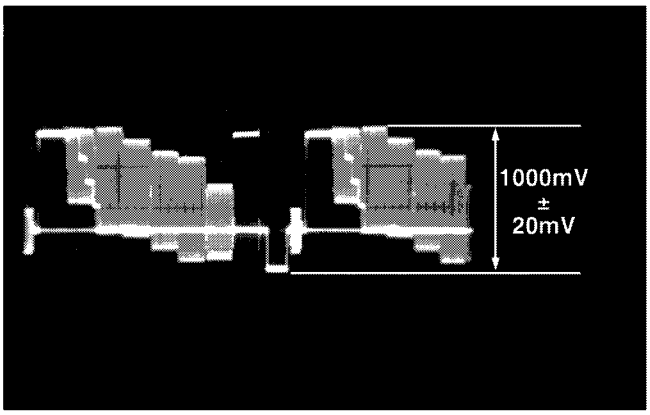
10.1. Video Output (Luminance Signal) Adjustment

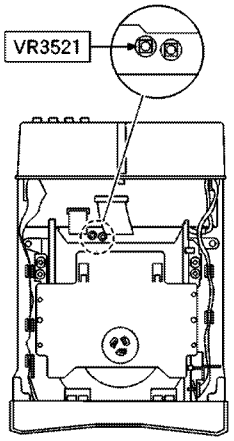
Do this adjustment after replacing a P.C.B.

Measurement point	Adjustment point	Mode	Disc
Video output terminal	VR3521	Color bar 75% PLAY (Title 46):DVDT-S15 PLAY (Title 12):DVDT-S01	DVDT-S15 or DVDT-S01
Measuring equipment, tools		Adjustment value	
Screwdriver, Oscilloscope 200mV/div, 10µsec/div		1000mVp-p±20mV	

Purpose: To maintain video signal output compatibility.

1. Connect the oscilloscope to the video output terminal and terminate at 75 ohms.
2. Adjust VR3501 so that the luminance signal (Y+S) level becomes 1000 mVp-p±20 mV.





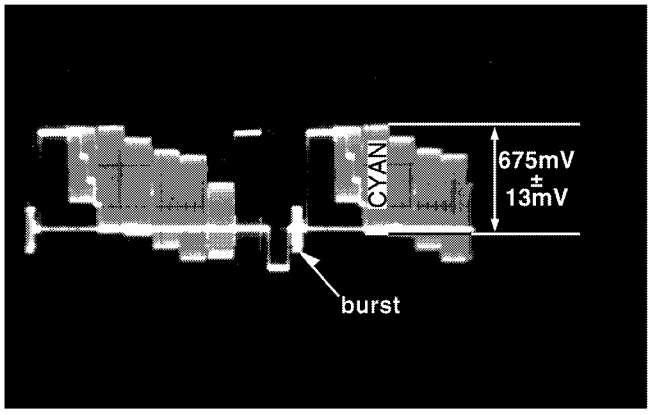
10.2. Video Output (Chrominance Signal) Adjustment

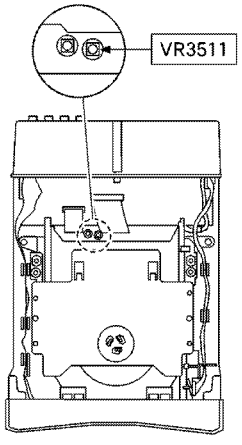
Do this adjustment after replacing a P.C.B.

Measurement point	Adjustment point	Mode	Disc
Video output terminal	VR3511 (mother P.C.B.)	Color bar 75% PLAY (Title 46):DVDT-S15 PLAY (Title 12):DVDT-S01	DVDT-S15 or DVDT-S01
Measuring equipment, tools		Adjustment value	
Screwdriver,Oscilloscope 200mV/div, 10µsec/div		671mVp-p±13mV	

Purpose: To maintain video signal output compatibility.

1. Connect the oscilloscope to the video output terminal and terminate at 75 ohms.
2. Adjust VR3511 so that the chrominance signal (C) level becomes 671 mVp-p±13 mV.





11 Measurements and Adjustments

Cautions:

- **It is very dangerous to look at or touch the laser beam. (Laser radiation is invisible.) With the unit turned "ON" , laser radiation is emitted from the pickup lens.**
- **Avoid exposure to the laser beam, especially when performing adjustments.**

This unit SL-HDA710 is designed to operate on power supplied from the Amplifier SE-HDA710 through the Tuner ST-HDA710.When connecting the unit to other system components, do not connect to the Amplifier SE-HDA710 directly. Be sure to connect thisunit through the Tuner ST-HDA710.When operating the unit SL-HDA710 alone for testing and servicing, without having power supplied from the Amplifier SE-HDA710, use the following method.

11.1. Power Supply to This Unit alone

Apply 10V DC power to the section between near side from rear panel of R101 and earth plate (E1). As it, apply 13V DC power to the section between nearside from rear panel of R102 and earth plate (E1) (as shown is Fig.3).

11.2. To Check Signals

Connect the oscilloscope or the speaker with built-in amplifier to the section between JK104- ⑯ pin (Rch out) and earth plate (E1) (GND) as well as the section between JK104- ⑱ pin (Lch out) and earth plate (E1) (GND) and check if the signals are outputting from this unit. (As shown in Fig. 3.)

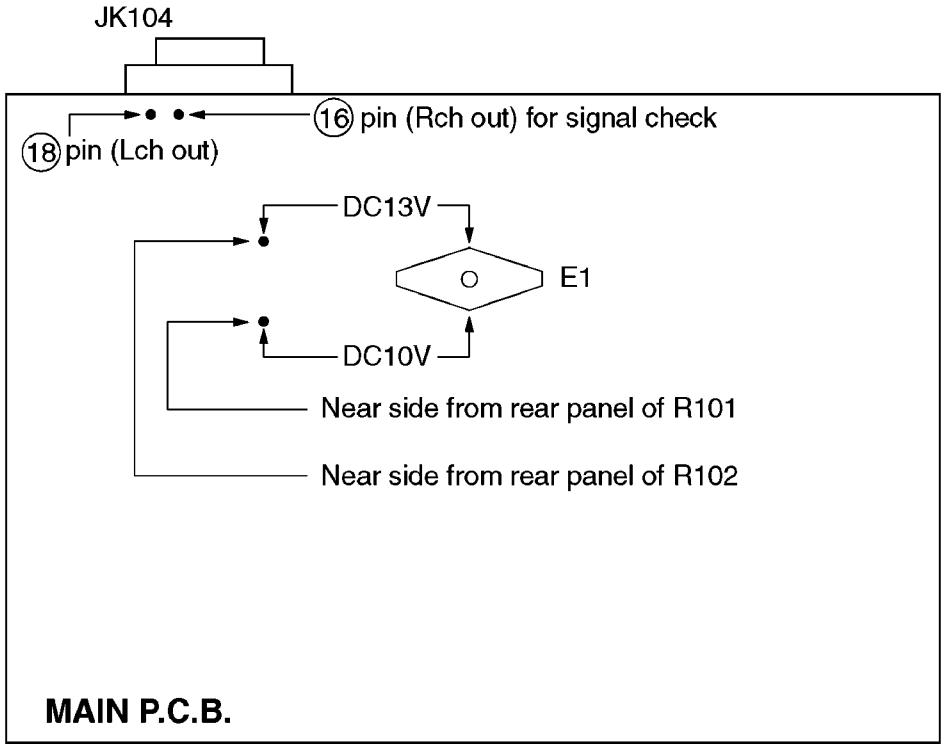
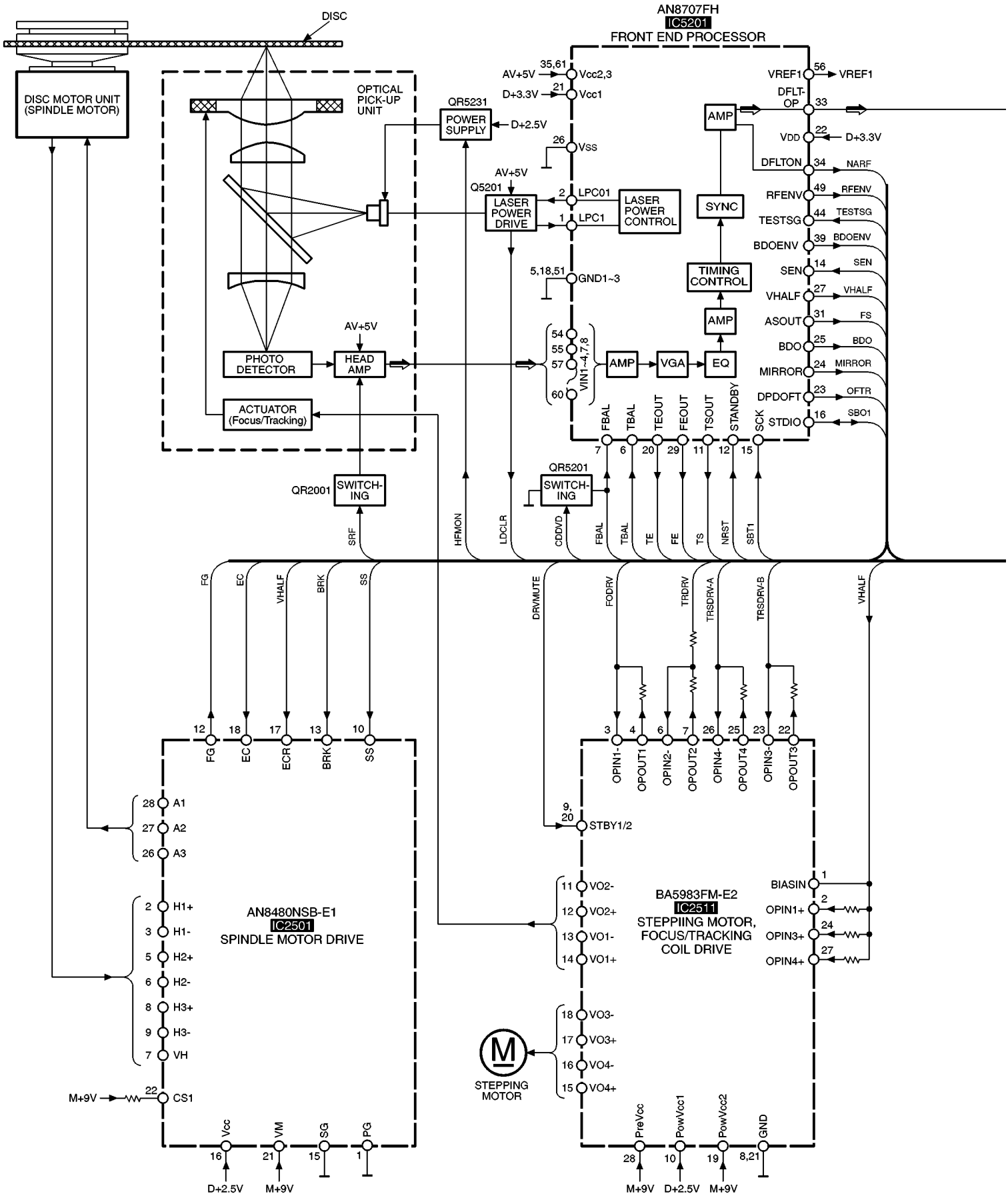
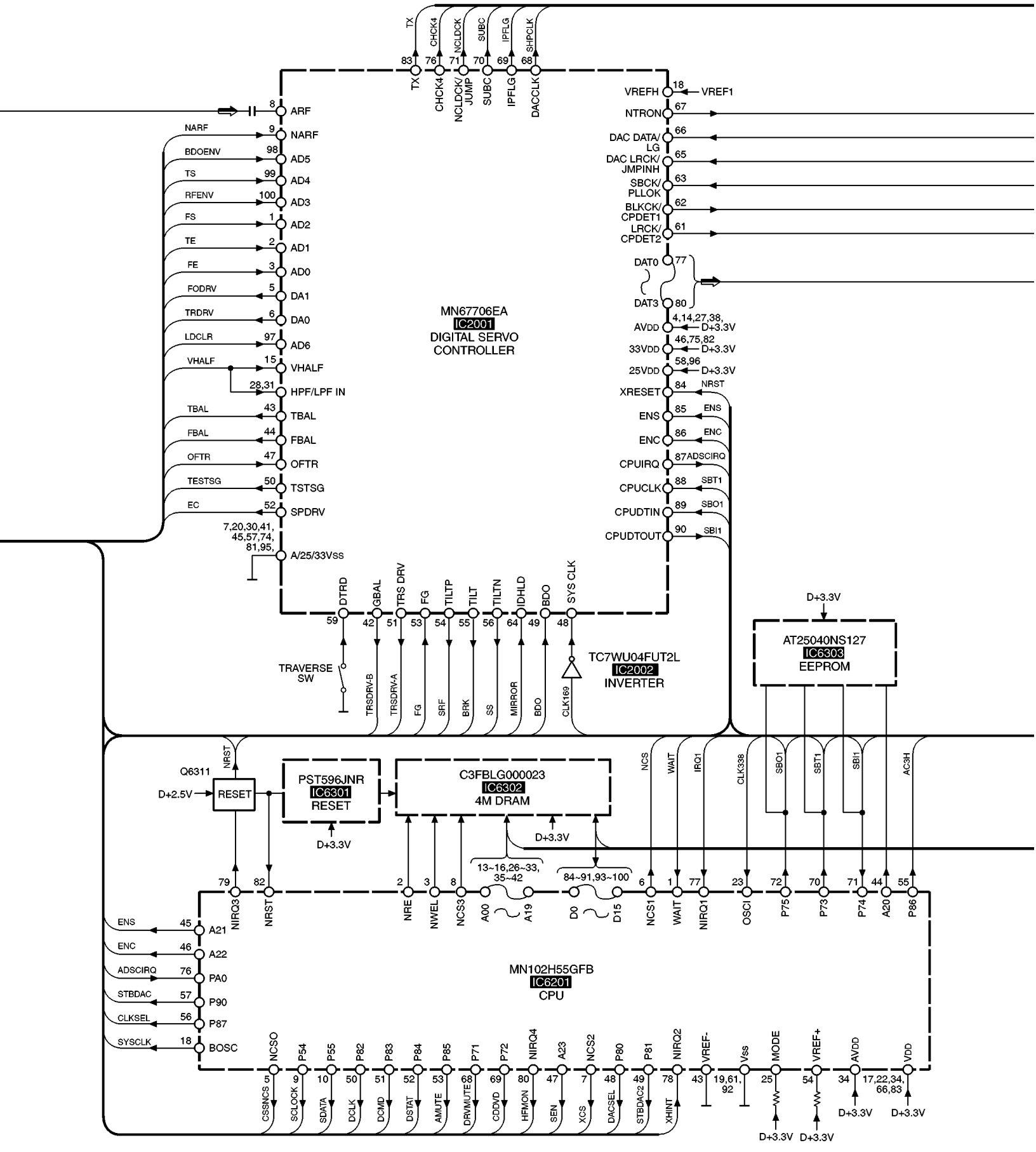
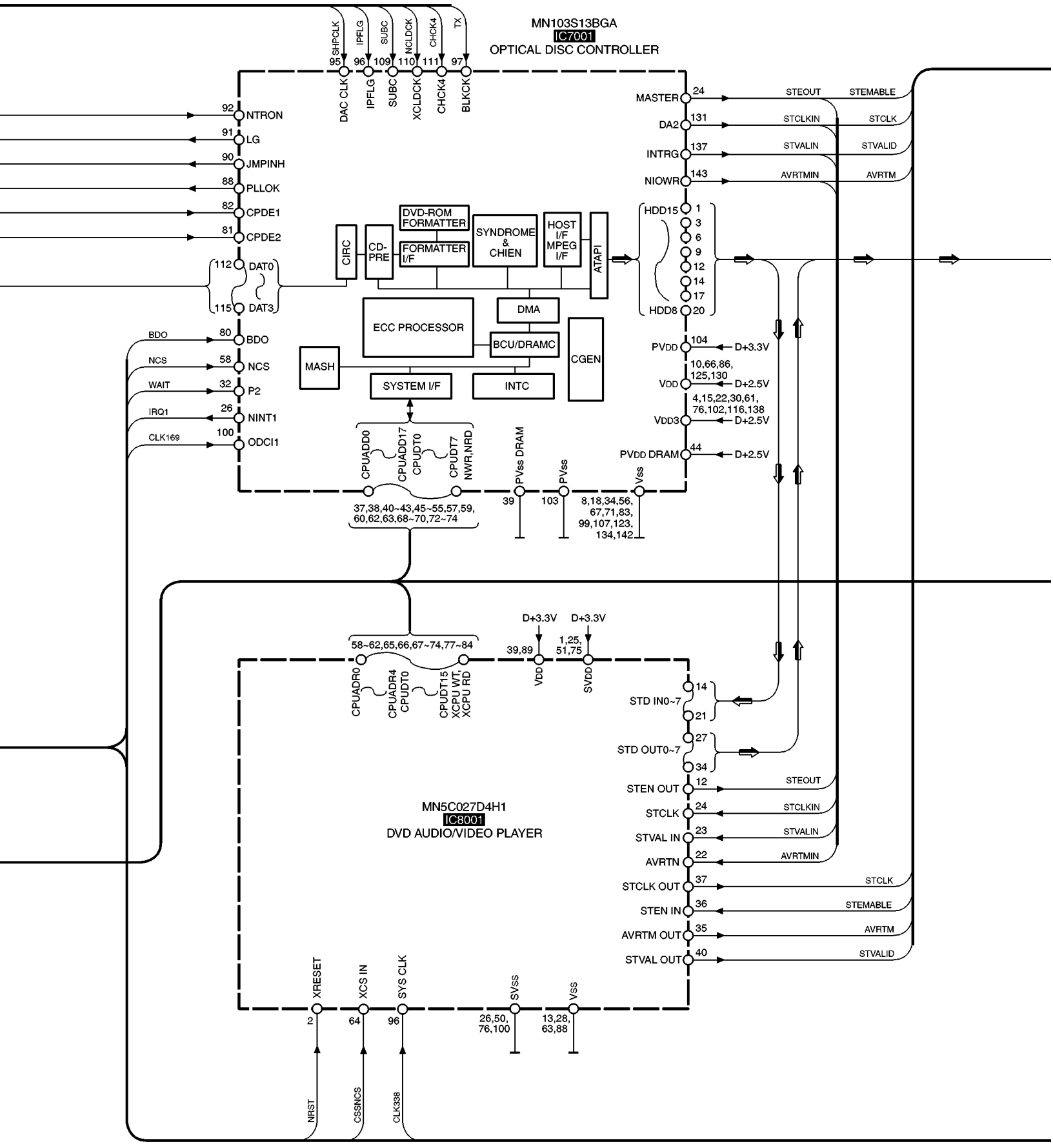


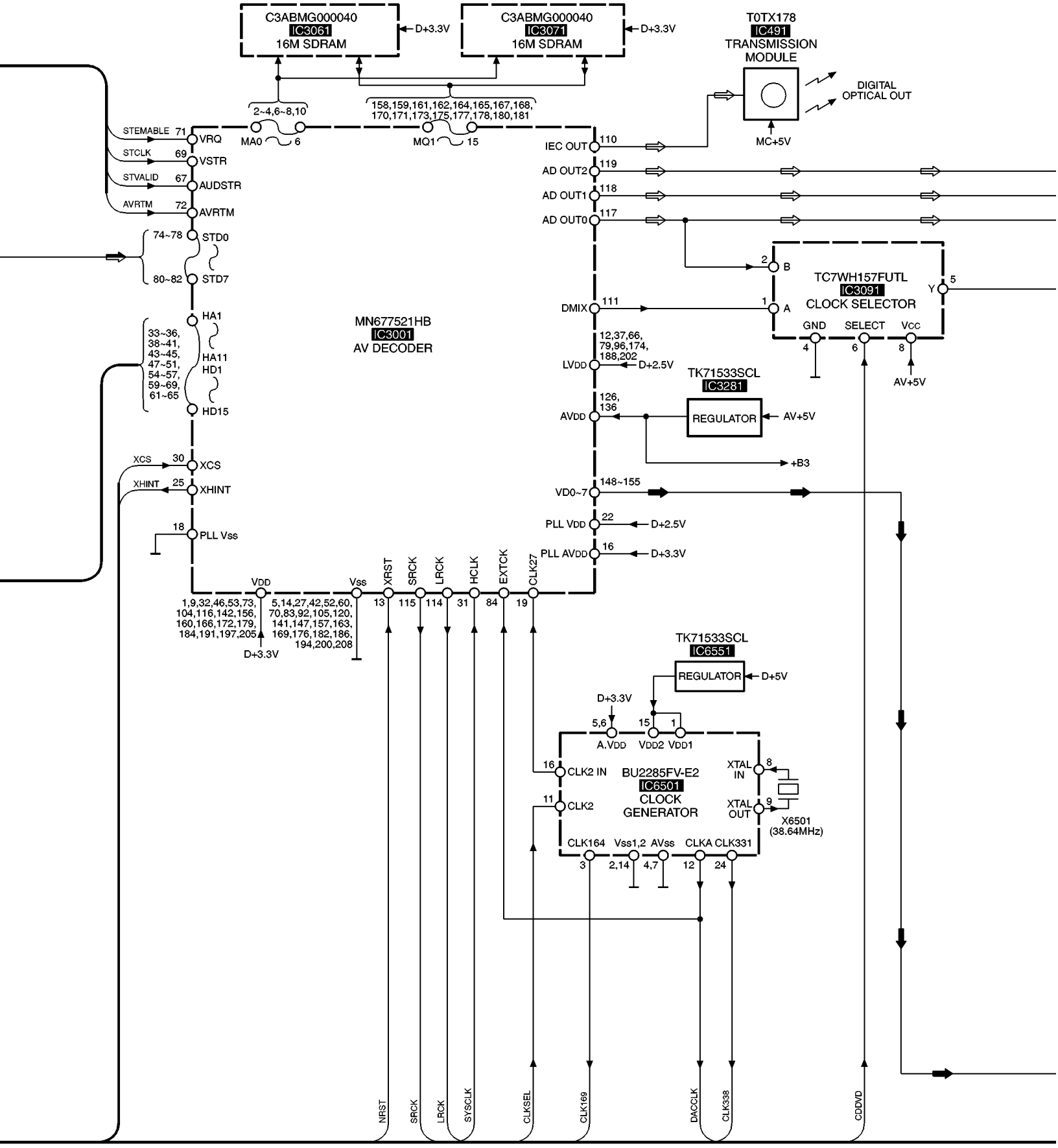
Fig. 3

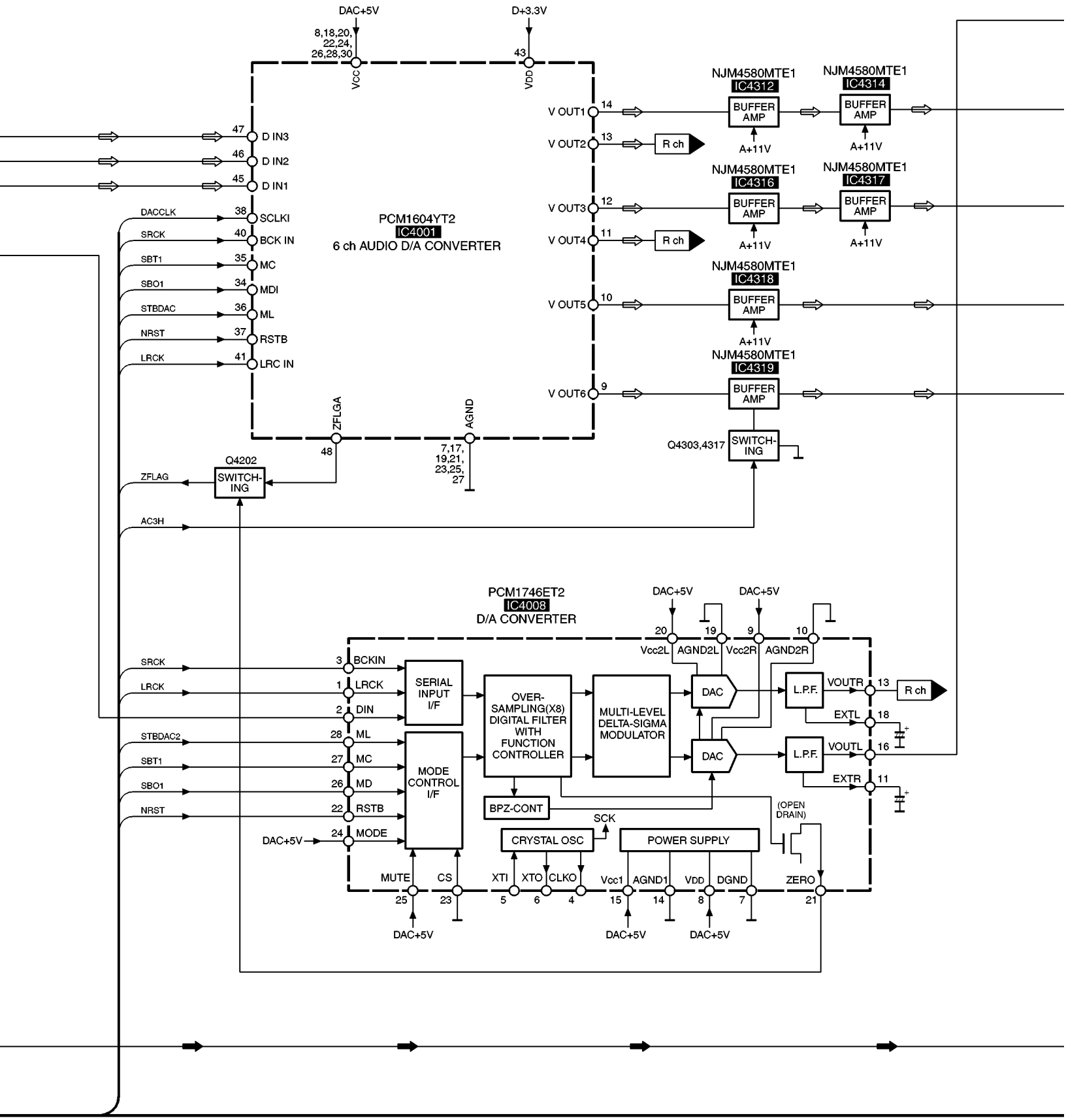
12 Block Diagram

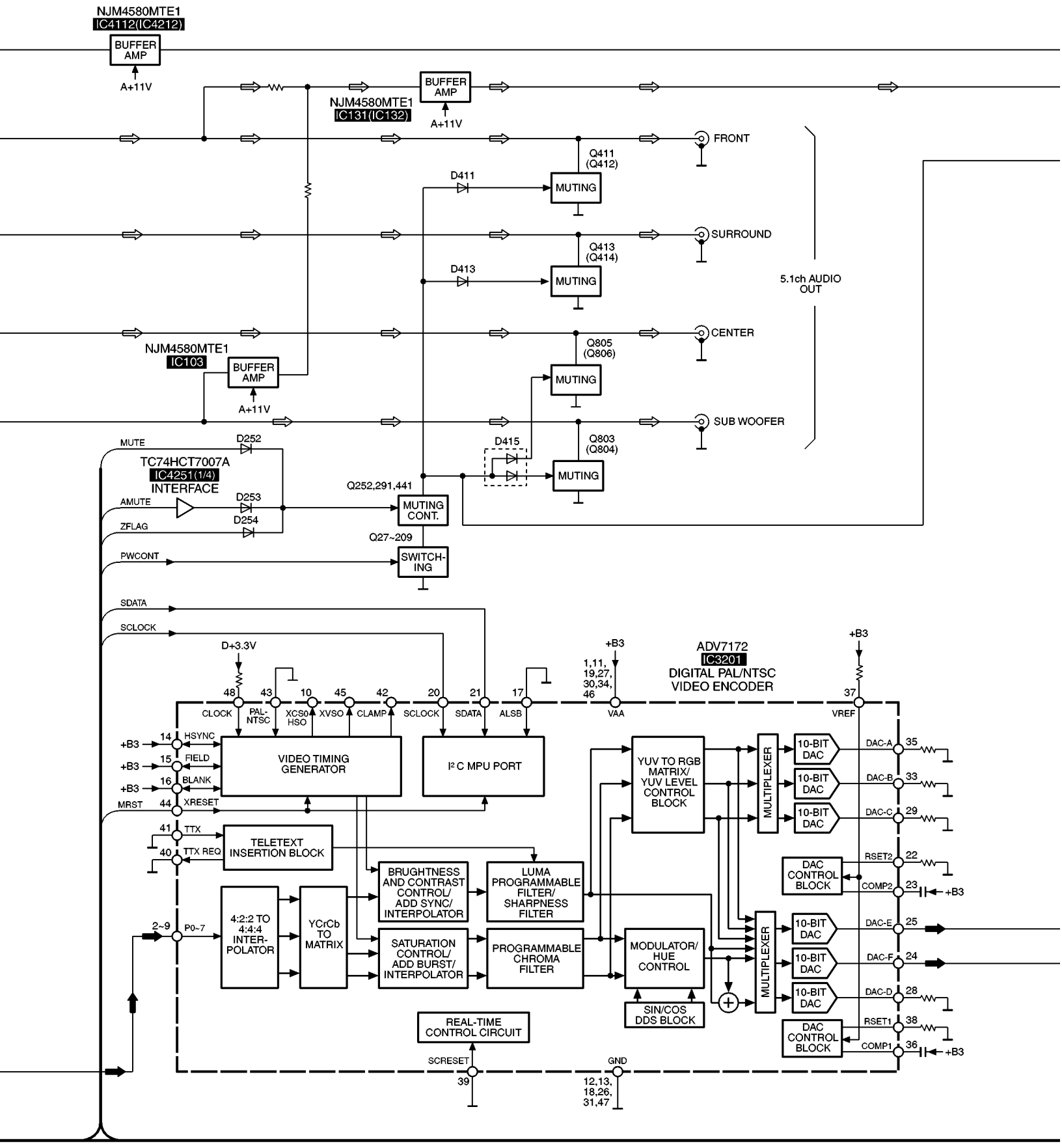


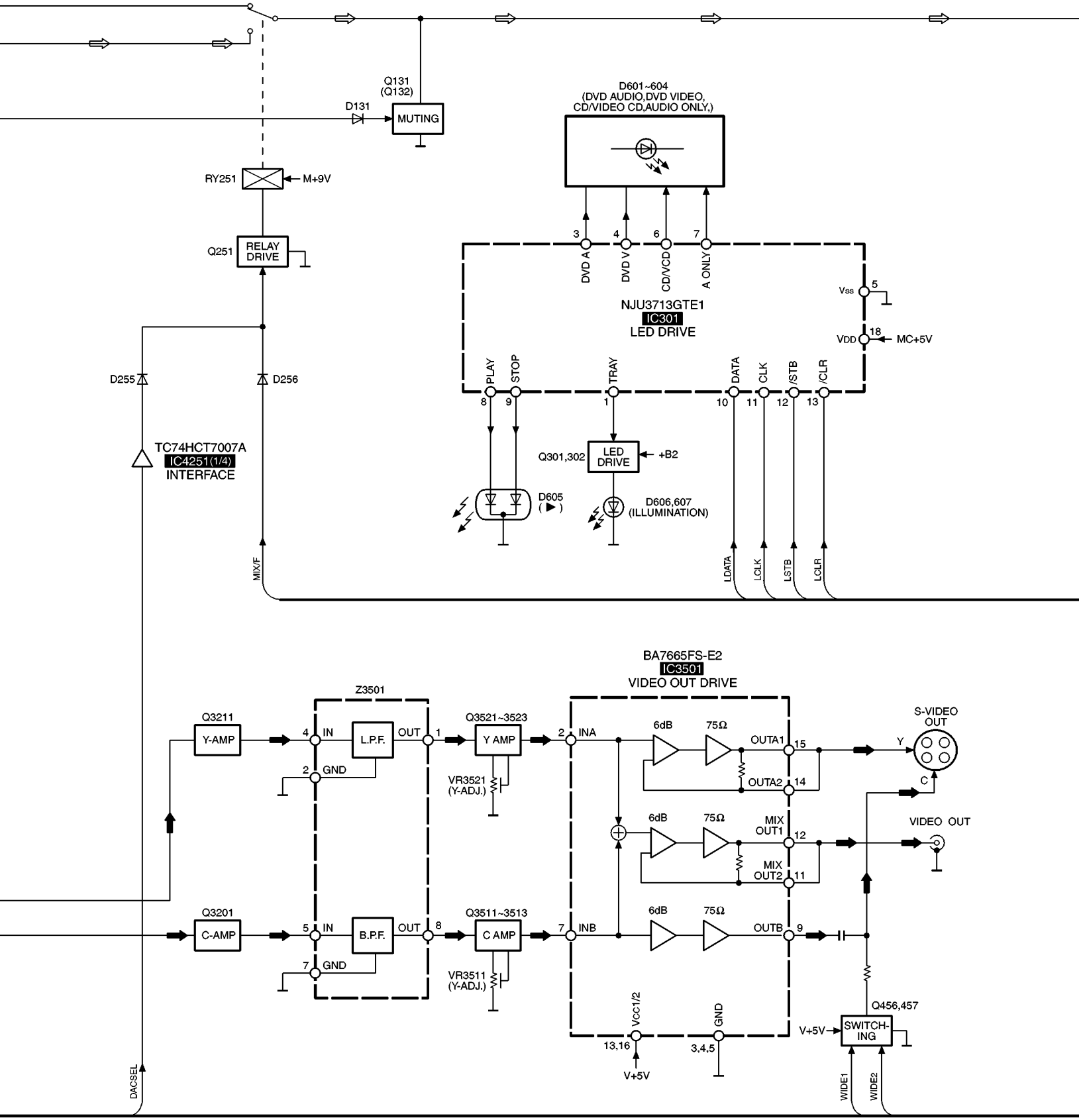

MN67706EA
IC2001
DIGITAL SERVO
CONTROLLER
TC7WU04FUT2L
IC2002
INVERTER
AT25040NS127
IC6303
EEPROM
PST596JNR
IC6301
RESET
C3FBLG000023
IC6302
4M DRAM
MN102H55GFB
IC6201
CPU
TRAVERSE
SW
Q6311
D+2.5V
D+3.3V
TX
CHCK4
NCLDCK/
JUMP
SUBC
IPFLG
DACCLK
ARF
NARF
AD5
AD4
AD3
AD2
AD1
AD0
DA1
DA0
AD6
VHALF
HPF/LPF IN
TBAL
FBAL
OFTR
TSTSG
SPDRV
A/25/33VSS
VREFH
VREF1
NTRON
DAC DATA/
LG
DAC LRCK/
JMPINH
SBCK/
PLLOK
BLKCK/
CPDET1
LRCK/
CPDET2
DAT0
DAT3
AVDD
33VDD
25VDD
XRESET
ENS
ENC
CPUIRQ
CPUCLK
CPUDTIN
CPUDTOUT
DTRD
GBAL
TRS DRV
FG
TILTP
TILT
TILTN
IDHLD
BDO
SYS CLK
TRSDRV-B
TRSDRV-A
FG
SRF
BRK
SS
MIRROR
BDO
CLK169
NRST
RESET
NRE
NWEL
NCS3
A00
A19
D0
D15
NCS1
WAIT
NIRQ1
OSCI
P75
P73
P74
A20
P86
NIRQ3
A21
A22
PA0
P90
P87
BOSC
NCSO
P54
P55
P82
P83
P84
P85
P71
P72
NIRQ4
A23
NCS2
P80
P81
NIRQ2
VREF-
Vss
MODE
VREF+
AVDD
VDD
CSSNCS
SCLOCK
SDATA
DCLK
DCMD
DSTAT
AMUTE
DRVMUTE
CDDVD
HFMON
SEN
XCS
DACSEL
STBDAC2
XHINT
NCS
WAIT
IRQ1
CLK338
SBO1
SBT1
SBI1
AC3H
ENS
ENC
ADSCIRQ
STBDAC
CLKSEL
SYSCLK
13~16,26~33,
35~42
84~91,93~100
19,61,
92
17,22,34,
66,83
4,14,27,38,
46,75,82
58,96
7,20,30,41,
45,57,74,
81,95,
28,31

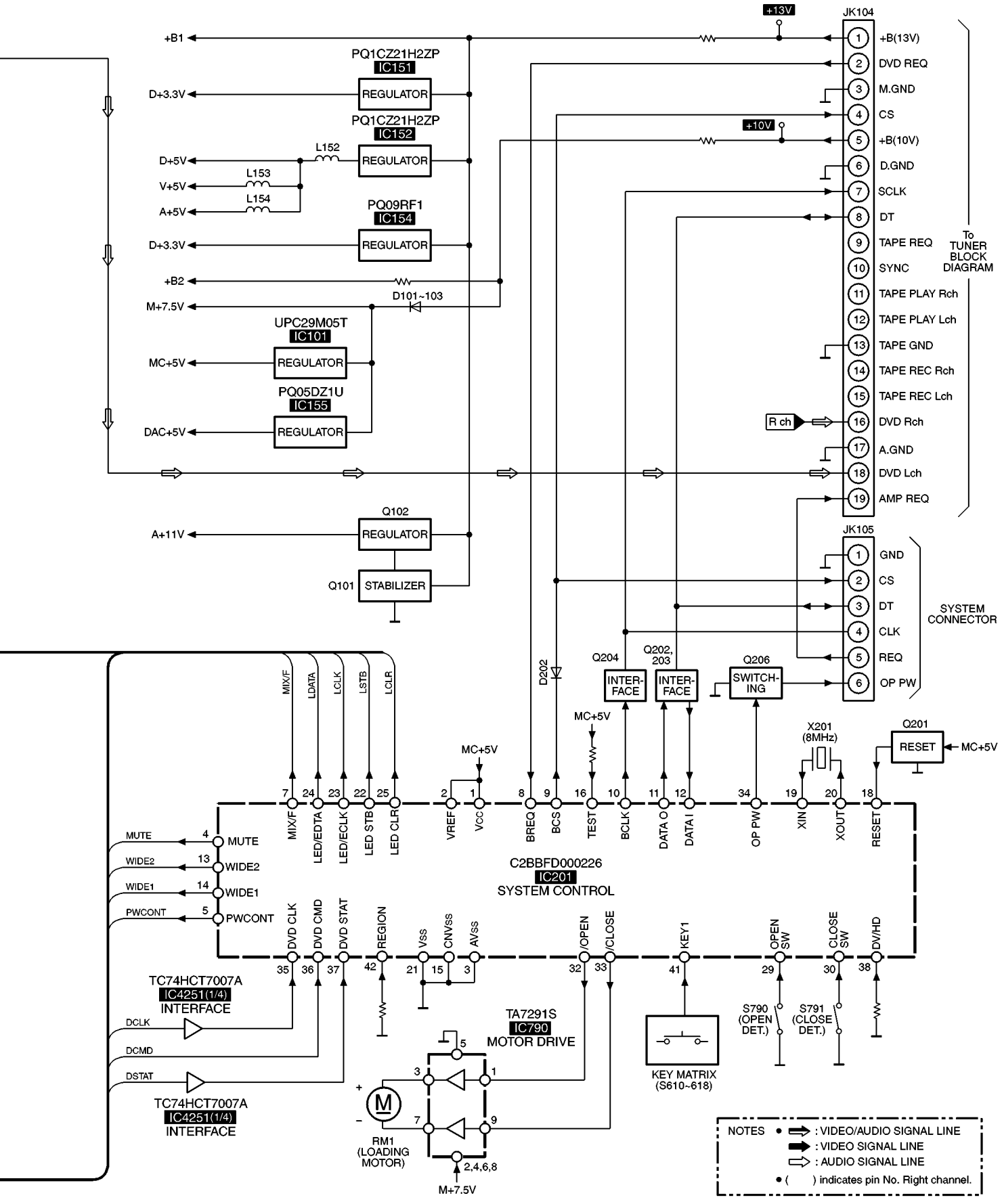

MN103S13BGA
IC7001
OPTICAL DISC CONTROLLER
SHPCLK
IPFLG
SUBC
NCLDCK
CHCK4
TX
95
96
109
110
111
97
DAC CLK
IPFLG
SUBC
XCLDCK
CHCK4
BLKCK
92 NTRON
91 LG
90 JMPINH
88 PLLOK
82 CPDE1
81 CPDE2
112 DAT0
115 DAT3
BDO 80 BDO
NCS 58 NCS
WAIT 32 P2
IRQ1 26 NINT1
CLK169 100 ODCI1
DVD-ROM FORMATTER
FORMATTER I/F
CIRC
CD-PRE
SYNDROME & CHIEN
HOST I/F MPEG I/F
ATAPI
ECC PROCESSOR
DMA
BCU/DRAMC
MASH
SYSTEM I/F
INTC
CGEN
CPUADD0
CPUADD17
CPUDT0
CPUDT7
NWR,NRD
37,38,40~43,45~55,57,59,
60,62,63,68~70,72~74
PVss DRAM
PVss
Vss
39
103
8,18,34,56,
67,71,83,
99,107,123,
134,142
MASTER 24
DA2 131
INTRG 137
NIOWR 143
STEOUT
STCLKIN
STVALIN
AVRTMIN
STEMABLE
STCLK
STVALID
AVRTM
HDD15 1
3
6
9
12
14
17
HDD8 20
PVDD 104 D+3.3V
VDD 10,66,86,
125,130 D+2.5V
VDD3 4,15,22,30,61,
76,102,116,138 D+2.5V
PVDD DRAM 44 D+2.5V
58~62,65,66,67~74,77~84
CPUADR0
CPUADR4
CPUDT0
CPUDT15
XCPU WT,
XCPU RD
D+3.3V
D+3.3V
39,89
1,25,
51,75
VDD
SVDD
STD IN0~7 14
21
STD OUT0~7 27
34
STEN OUT 12
STCLK 24
STVAL IN 23
AVRTN 22
STCLK OUT 37
STEN IN 36
AVRTM OUT 35
STVAL OUT 40
MN5C027D4H1
IC8001
DVD AUDIO/VIDEO PLAYER
XRESET
XCS IN
SYS CLK
SVss
Vss
2
64
96
26,50,
76,100
13,28,
63,88
NRST
CSSNCS
CLK338


C3ABMG000040
IC3061
16M SDRAM
D+3.3V
C3ABMG000040
IC3071
16M SDRAM
D+3.3V
T0TX178
IC491
TRANSMISSION MODULE
DIGITAL OPTICAL OUT
MC+5V
2~4,6~8,10
158,159,161,162,164,165,167,168,170,171,173,175,177,178,180,181
MA0
6
MQ1
15
STEMABLE 71
VRQ
STCLK 69
VSTR
STVALID 67
AUDSTR
AVRTM 72
AVRTM
74~78
STD0
80~82
STD7
HA1
33~36,38~41,43~45,47~51,54~57,59~69,61~65
HA11
HD1
HD15
MN677521HB
IC3001
AV DECODER
IEC OUT 110
AD OUT2 119
AD OUT1 118
AD OUT0 117
DMIX 111
LVDD
12,37,66,79,96,174,188,202
D+2.5V
AVDD
126,136
TK71533SCL
IC3281
REGULATOR
AV+5V
+B3
TC7WH157FUTL
IC3091
CLOCK SELECTOR
GND
SELECT
VCC
AV+5V
VD0~7
148~155
PLL VDD
22
D+2.5V
PLL AVDD
16
D+3.3V
XCS 30
XCS
XHINT 25
XHINT
18
PLL Vss
VDD
Vss
XRST
SRCK
LRCK
HCLK
EXTCK
CLK27
1,9,32,46,53,73,104,116,142,156,160,166,172,179,184,191,197,205
D+3.3V
5,14,27,42,52,60,70,83,92,105,120,141,147,157,163,169,176,182,186,194,200,208
13
115
114
31
84
19
TK71533SCL
IC6551
REGULATOR
D+5V
D+3.3V
5,6
A.VDD
15
VDD2
1
VDD1
16
CLK2 IN
11
CLK2
BU2285FV-E2
IC6501
CLOCK GENERATOR
XTAL IN
8
XTAL OUT
9
X6501
(38.64MHz)
CLK164
3
Vss1,2
2,14
AVss
4,7
CLKA
12
CLK331
24
NRST
SRCK
LRCK
SYSCLK
CLKSEL
CLK169
DACCLK
CLK338
CDDVD


DAC+5V
8,18,20,
22,24,
26,28,30
VCC
D+3.3V
43
VDD
PCM1604YT2
IC4001
6 ch AUDIO D/A CONVERTER
47 D IN3
46 D IN2
45 D IN1
DACCLK 38 SCLKI
SRCK 40 BCK IN
SBT1 35 MC
SBO1 34 MDI
STBDAC 36 ML
NRST 37 RSTB
LRCK 41 LRC IN
ZFLGA 48
AGND 7,17,19,21,23,25,27
V OUT1 14
V OUT2 13
V OUT3 12
V OUT4 11
V OUT5 10
V OUT6 9
NJM4580MTE1 IC4312
NJM4580MTE1 IC4314
NJM4580MTE1 IC4316
NJM4580MTE1 IC4317
NJM4580MTE1 IC4318
NJM4580MTE1 IC4319
BUFFER AMP
A+11V
R ch
Q4303,4317 SWITCH-ING
Q4202 SWITCH-ING
ZFLAG
AC3H
PCM1746ET2
IC4008
D/A CONVERTER
DAC+5V
20 Vcc2L
19 AGND2L
9 Vcc2R
10 AGND2R
SRCK
LRCK
STBDAC2
SBT1
SBO1
NRST
DAC+5V
3 BCKIN
1 LRCK
2 DIN
28 ML
27 MC
26 MD
22 RSTB
24 MODE
SERIAL INPUT I/F
MODE CONTROL I/F
OVER-SAMPLING(X8) DIGITAL FILTER WITH FUNCTION CONTROLLER
MULTI-LEVEL DELTA-SIGMA MODULATOR
BPZ-CONT
DAC
L.P.F.
VOUTR 13
EXTL 18
VOUTL 16
EXTR 11
(OPEN DRAIN)
SCK
CRYSTAL OSC
POWER SUPPLY
MUTE 25
CS 23
XTI 5
XTO 6
CLKO 4
Vcc1 15
AGND1 14
VDD 8
DGND 7
ZERO 21

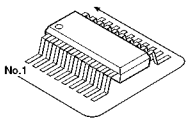

NJM4580MTE1
IC4112(IC4212)
BUFFER AMP
A+11V
NJM4580MTE1
IC131(IC132)
BUFFER AMP
A+11V
FRONT
Q411 (Q412)
D411
MUTING
SURROUND
Q413 (Q414)
D413
MUTING
5.1ch AUDIO OUT
CENTER
Q805 (Q806)
MUTING
NJM4580MTE1
IC103
BUFFER AMP
A+11V
SUB WOOFER
Q803 (Q804)
D415
MUTING
MUTE
D252
TC74HCT7007A
IC4251(1/4)
INTERFACE
AMUTE
D253
D254
ZFLAG
Q252,291,441
MUTING CONT.
Q27~209
SWITCH-ING
PWCONT
SDATA
SCLOCK
D+3.3V
+B3
1,11, 19,27, 30,34, 46
ADV7172
IC3201
DIGITAL PAL/NTSC VIDEO ENCODER
+B3
48 CLOCK
43 PAL-NTSC
10 XCS0 HSO
45 XVSO
42 CLAMP
20 SCLOCK
21 SDATA
17 ALSB
VAA
37 VREF
14 HSYNC
15 FIELD
16 BLANK
44 XRESET
MRST
VIDEO TIMING GENERATOR
I²C MPU PORT
41 TTX
40 TTX REQ
TELETEXT INSERTION BLOCK
BRUGHTNESS AND CONTRAST CONTROL/ ADD SYNC/ INTERPOLATOR
LUMA PROGRAMMABLE FILTER/ SHARPNESS FILTER
2~9
P0~7
4:2:2 TO 4:4:4 INTER-POLATOR
YCrCb TO MATRIX
SATURATION CONTROL/ ADD BURST/ INTERPOLATOR
PROGRAMMABLE CHROMA FILTER
YUV TO RGB MATRIX/ YUV LEVEL CONTROL BLOCK
MODULATOR/ HUE CONTROL
SIN/COS DDS BLOCK
MULTIPLEXER
MULTIPLEXER
10-BIT DAC
DAC-A 35
10-BIT DAC
DAC-B 33
10-BIT DAC
DAC-C 29
DAC CONTROL BLOCK
RSET2 22
COMP2 23
+B3
10-BIT DAC
DAC-E 25
10-BIT DAC
DAC-F 24
10-BIT DAC
DAC-D 28
DAC CONTROL BLOCK
RSET1 38
COMP1 36
+B3
REAL-TIME CONTROL CIRCUIT
SCRESET 39
GND 12,13, 18,26, 31,47


Q131
(Q132)
D131
MUTING
D601~604
(DVD AUDIO,DVD VIDEO,
CD/VIDEO CD,AUDIO ONLY,)
RY251
M+9V
Q251
RELAY
DRIVE
3
4
6
7
DVD A
DVD V
CD/VCD
A ONLY
Vss
5
NJU3713GTE1
IC301
LED DRIVE
VDD
18
MC+5V
D255
D256
PLAY
STOP
TRAY
DATA
CLK
/STB
/CLR
8
9
1
10
11
12
13
TC74HCT7007A
IC4251(1/4)
INTERFACE
Q301,302
LED
DRIVE
+B2
D605
(▶)
D606,607
(ILLUMINATION)
MIX/F
LDATA
LCLK
LSTB
LCLR
BA7665FS-E2
IC3501
VIDEO OUT DRIVE
Z3501
Q3211
Y-AMP
4
IN
L.P.F.
OUT
1
2
GND
Q3521~3523
Y AMP
VR3521
(Y-ADJ.)
2
INA
6dB
75Ω
OUTA1
15
OUTA2
14
S-VIDEO
OUT
Y
C
6dB
75Ω
MIX
OUT1
12
MIX
OUT2
11
VIDEO OUT
Q3201
C-AMP
5
IN
B.P.F.
OUT
8
7
GND
Q3511~3513
C AMP
VR3511
(Y-ADJ.)
7
INB
6dB
75Ω
OUTB
9
Vcc1/2
13,16
V+5V
GND
3,4,5
Q456,457
V+5V
SWITCH-
ING
DACSEL
WIDE1
WIDE2

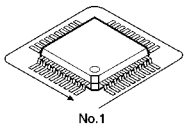

+B1
D+3.3V
D+5V
V+5V
A+5V
D+3.3V
+B2
M+7.5V
MC+5V
DAC+5V
A+11V
Q101
PQ1CZ21H2ZP
IC151
REGULATOR
PQ1CZ21H2ZP
IC152
REGULATOR
L152
L153
L154
PQ09RF1
IC154
REGULATOR
D101~103
UPC29M05T
IC101
REGULATOR
PQ05DZ1U
IC155
REGULATOR
Q102
REGULATOR
STABILIZER
+13V
+10V
JK104
+B(13V)
DVD REQ
M.GND
CS
+B(10V)
D.GND
SCLK
DT
TAPE REQ
SYNC
TAPE PLAY Rch
TAPE PLAY Lch
TAPE GND
TAPE REC Rch
TAPE REC Lch
R ch
DVD Rch
A.GND
DVD Lch
AMP REQ
To TUNER BLOCK DIAGRAM
JK105
GND
CS
DT
CLK
REQ
OP PW
SYSTEM CONNECTOR
D202
Q204
INTER-FACE
Q202, 203
INTER-FACE
Q206
SWITCH-ING
MC+5V
X201 (8MHz)
Q201
RESET
MIX/F
LDATA
LCLK
LSTB
LCLR
VREF
Vcc
BREQ
BCS
TEST
BCLK
DATA O
DATA I
OP PW
XIN
XOUT
RESET
MUTE
WIDE2
WIDE1
PWCONT
C2BBFD000226
IC201
SYSTEM CONTROL
DVD CLK
DVD CMD
DVD STAT
REGION
Vss
CNVss
AVss
/OPEN
/CLOSE
KEY1
OPEN SW
CLOSE SW
DV/HD
TC74HCT7007A
IC4251(1/4)
INTERFACE
DCLK
DCMD
DSTAT
TC74HCT7007A
IC4251(1/4)
INTERFACE
TA7291S
IC790
MOTOR DRIVE
RM1
(LOADING MOTOR)
M+7.5V
KEY MATRIX
(S610~618)
S790
(OPEN DET.)
S791
(CLOSE DET.)
NOTES
: VIDEO/AUDIO SIGNAL LINE
: VIDEO SIGNAL LINE
: AUDIO SIGNAL LINE
( ) indicates pin No. Right channel.

13 Schematic Diagram Notes

13.1. Type Illustration of IC´s, Transistors and Diodes

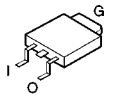


BU2285FV-E2	24PIN	BA7665FS-E2	16PIN
C2BBFD000226	42PIN	AT25040NSI27	8PIN
NJM4580MTE1	8PIN	TC7WU04FUT2L	8PIN
PCM1746ET2	28PIN	NJU3713GTE1	18PIN
TC7WH157FUTL	8PIN	C3ABMG000040	50PIN



MN102H55GFB	100PIN	ADV7172	48PIN
MN103S13BGA	144PIN	MN677521HB	208PIN
MN67706EA	100PIN		
AN8707FH	64PIN		
PCM1604YT2	48PIN		
MN5C027D4H1	100PIN		

UPC29M05T



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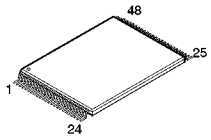

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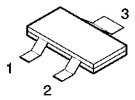

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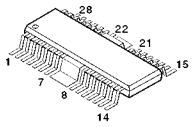
BA5983FM-E2



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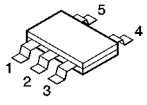

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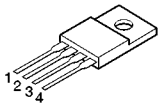

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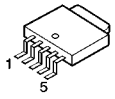
PQ025EZ01ZP
PQ05DZ1U



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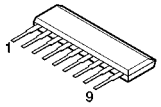

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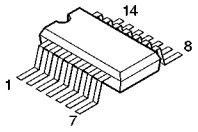

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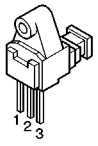

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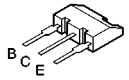

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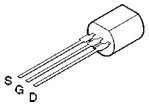

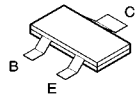

2SB1218ARTX
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2SC4081STX
2SD1819ASTX
UN5114TX
UN5212TX
UN2121-TX
UN5213TX
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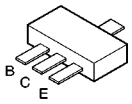

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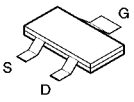

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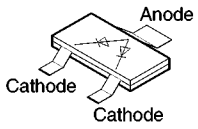

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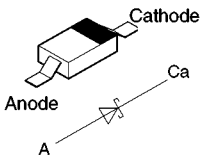

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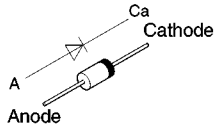

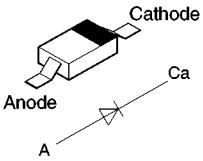

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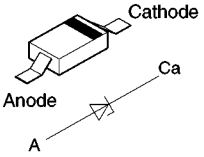
MA2H73500L
SFPB-64

MA8110MTX



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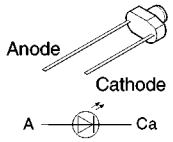

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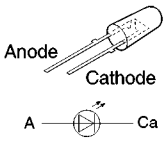

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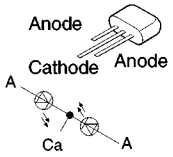


13.2. Scheamtic Diagram Notes

This schematic diagram may be modified at any time with the development of new technology.

Notes:

- S216 : Pause (■) switch.
- S610 : Audio only (AUDIO ONLY) switch.
- S611 : Multi (MULTI) switch.
- S612 : AI edit (AI EDIT) switch.
- S613 : R. skip/ search (|◀◀ / ◀◀) switch.
- S614 : F. skip/ search (▶▶ / ▶▶|) switch
- S615 : Stop (■) switch.
- S617 : Play (▶) switch.
- S618 : CD tray open/close (▲ OPEN/CLOSE) switch.
- S701 : Rest position detect switch in "OFF" position. (It turns "ON" when optical pickup comes to innermost periphery)
- S790 : CD tray open detection switch.
- S791 : CD tray close detection switch.
- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internalimpedance of the DC circuit tester.

No mark: CD STOP

( ): CD play [1kHz, L+R, 0dB]

Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purpose of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used. When replacing any of components, be sure to use only manufacture´s specified parts shown in theparts list.

Caution!

- IC and LSI are sensitive to static electricity.
- Secondary trouble can be prevented by taking care during repair.
- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the legs of IC or LSI with the fingers directly.

Voltage and signal lines

: Positive voltage line

: AUDIO signal line

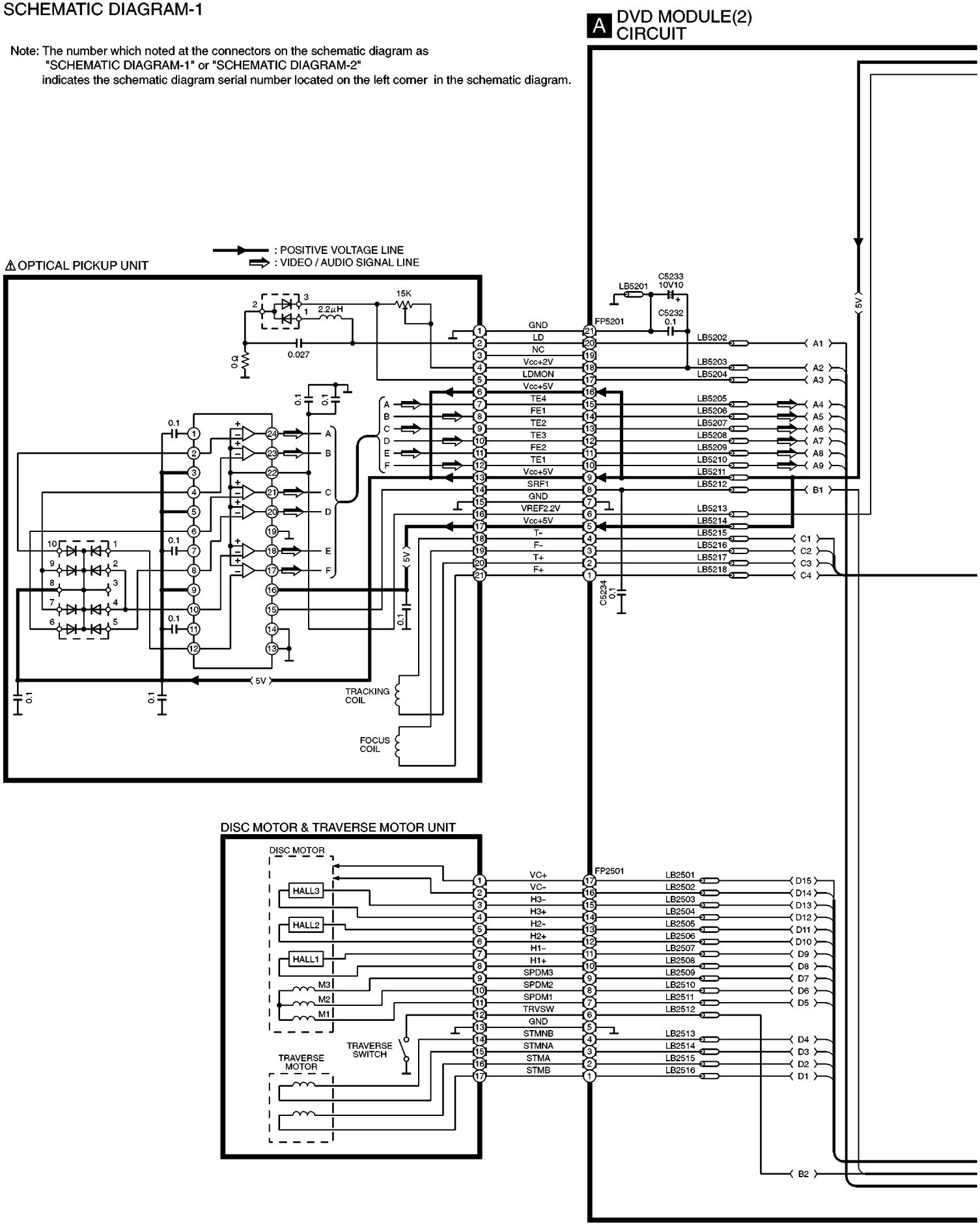
: VIDEO/AUDIO signal line

: VIDEO signal line

14 Schematic Diagram

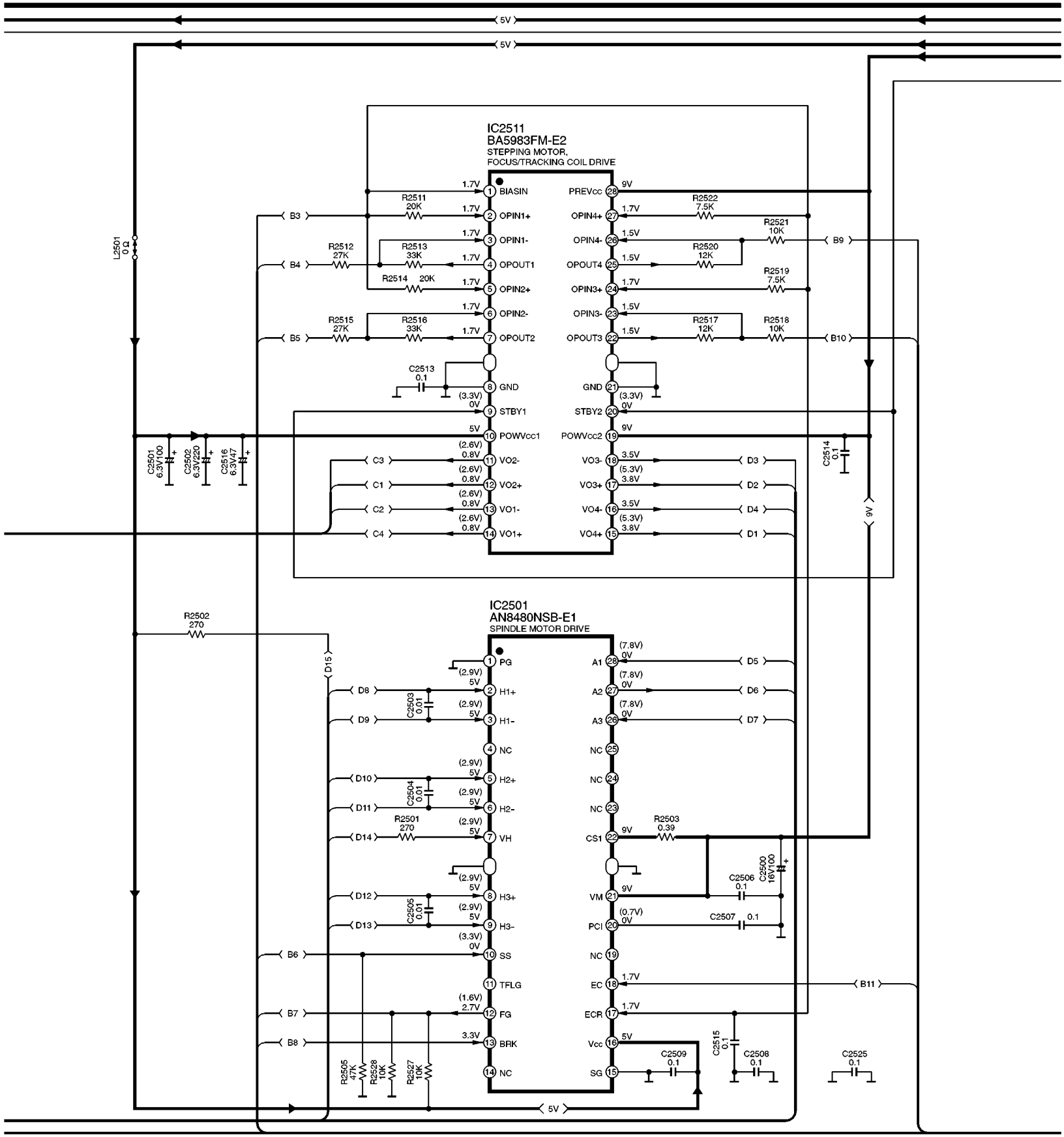
SCHEMATIC DIAGRAM-1

Note: The number which noted at the connectors on the schematic diagram as "SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2" indicates the schematic diagram serial number located on the left corner in the schematic diagram.



SCHEMATIC DIAGRAM-2

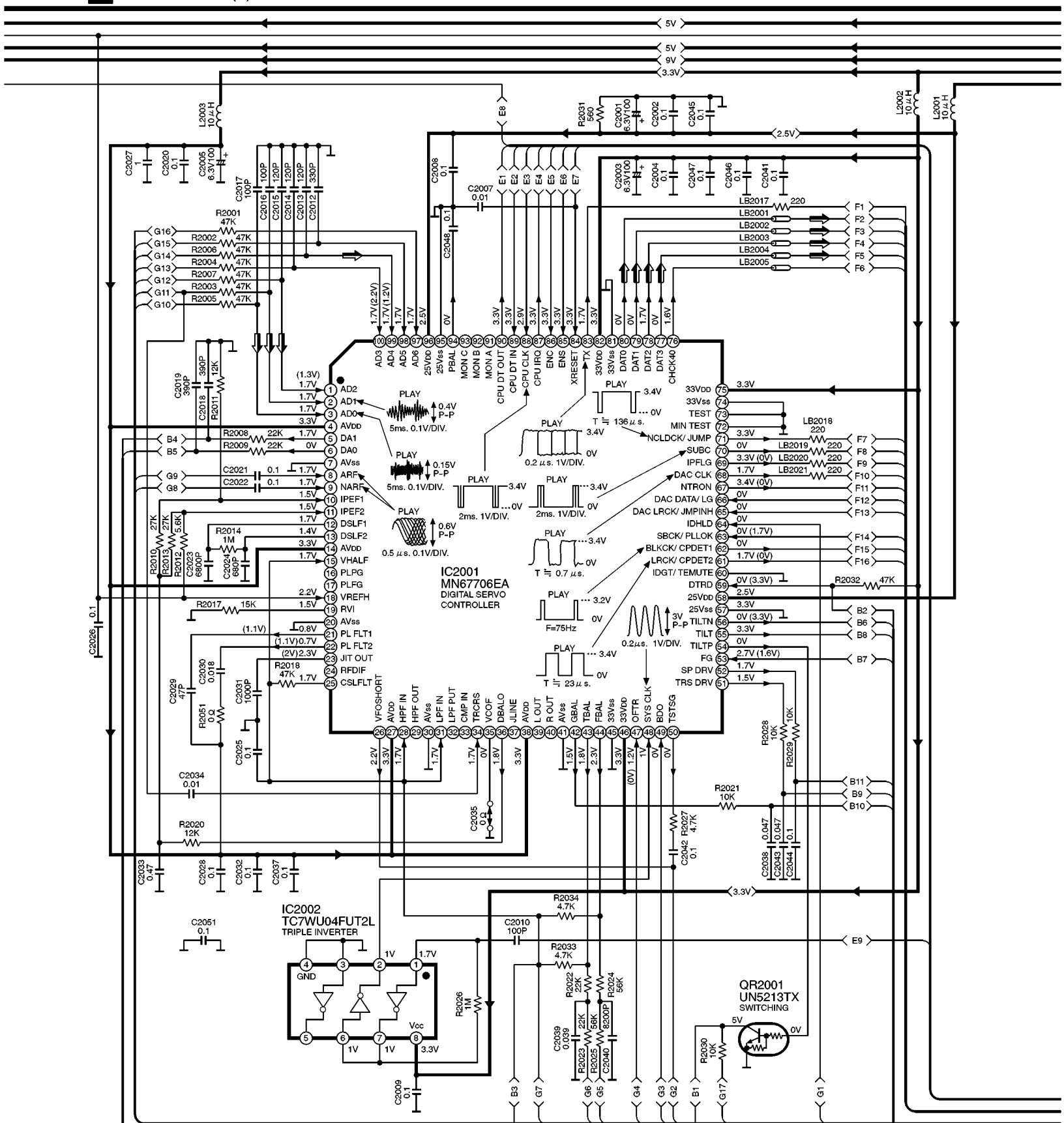
: POSITIVE VOLTAGE LINE



SCHEMATIC DIAGRAM-3

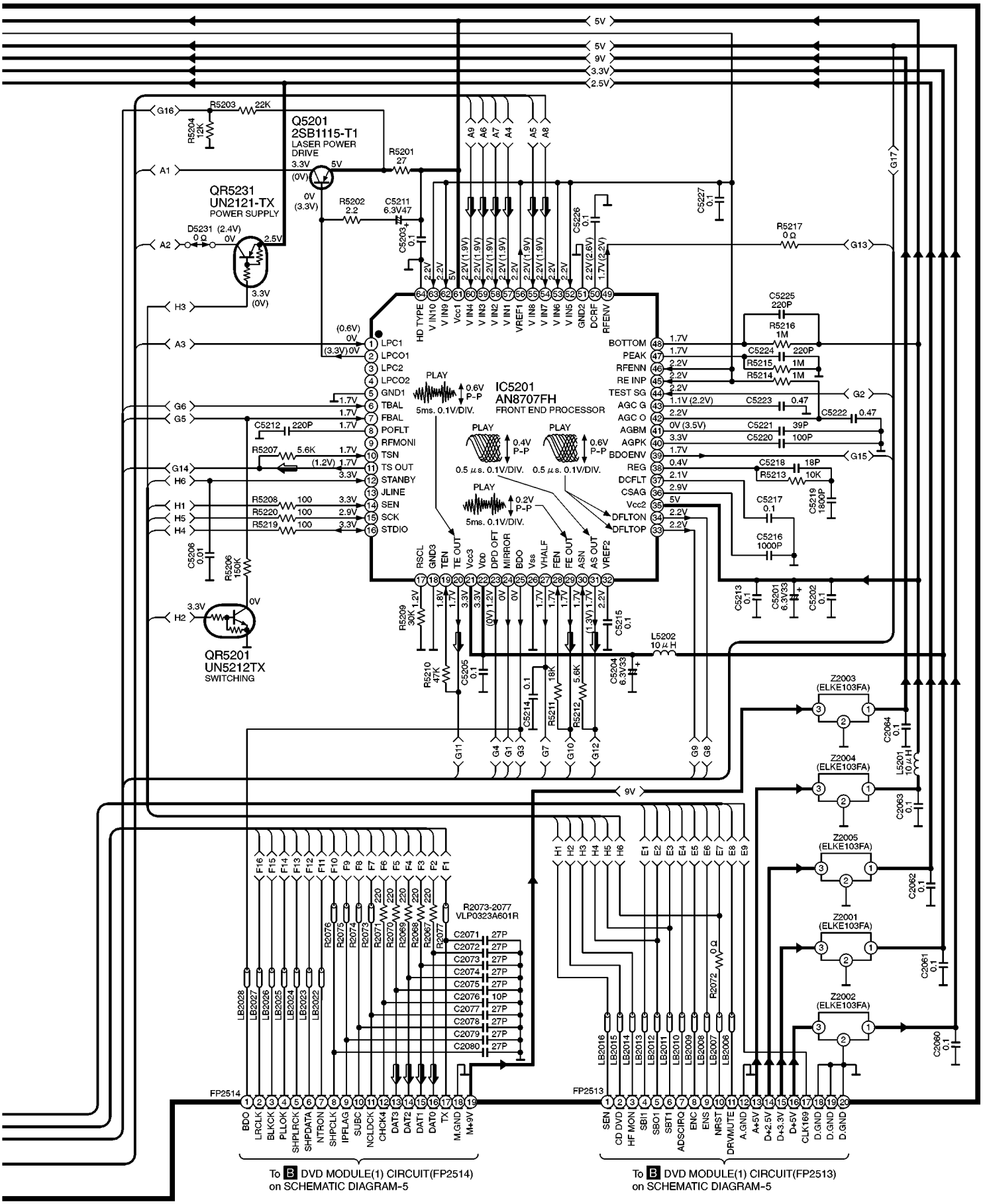
A DVD MODULE(2) CIRCUIT

: POSITIVE VOLTAGE LINE : VIDEO / AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-4

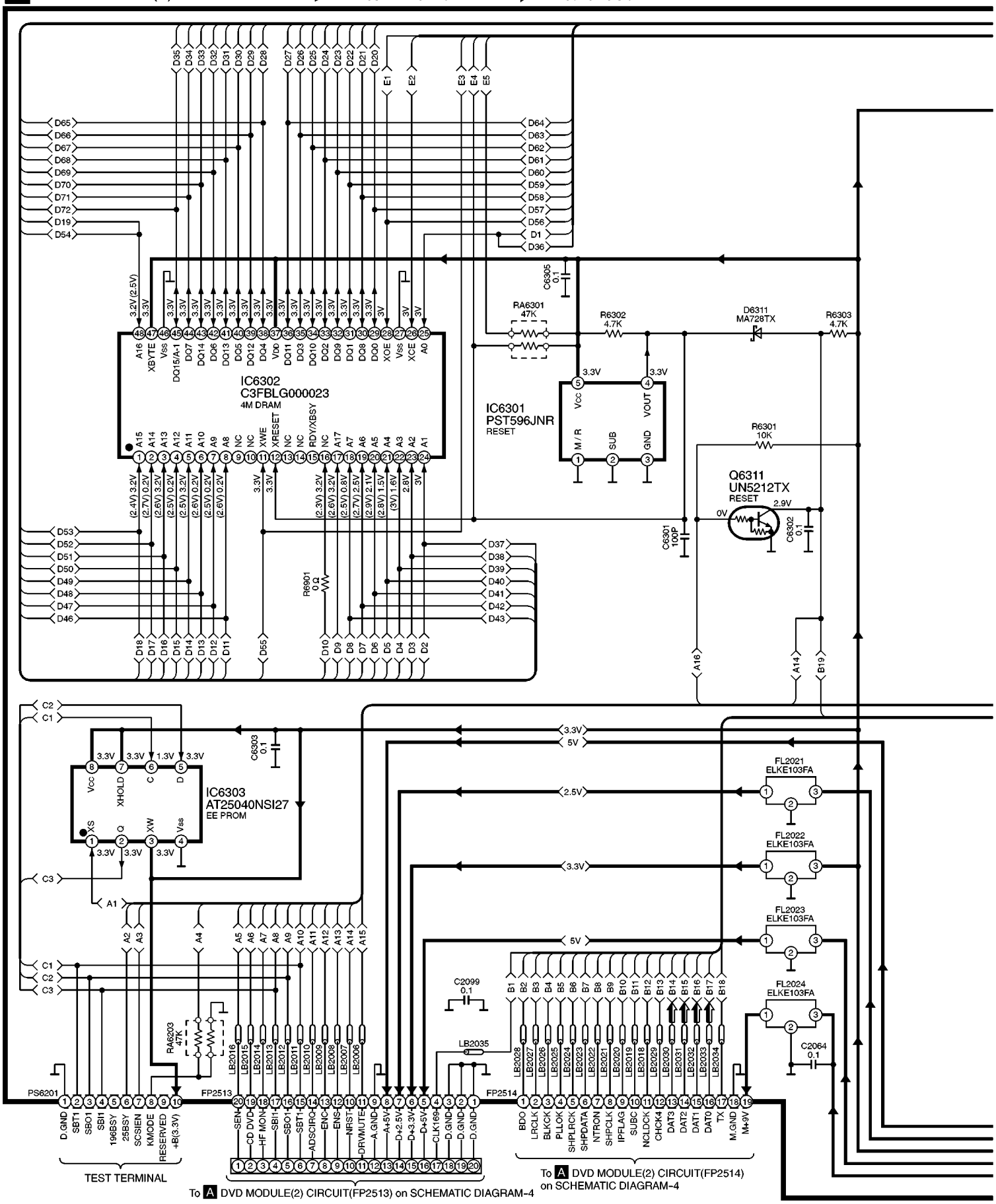
: POSITIVE VOLTAGE LINE : VIDEO / AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-5

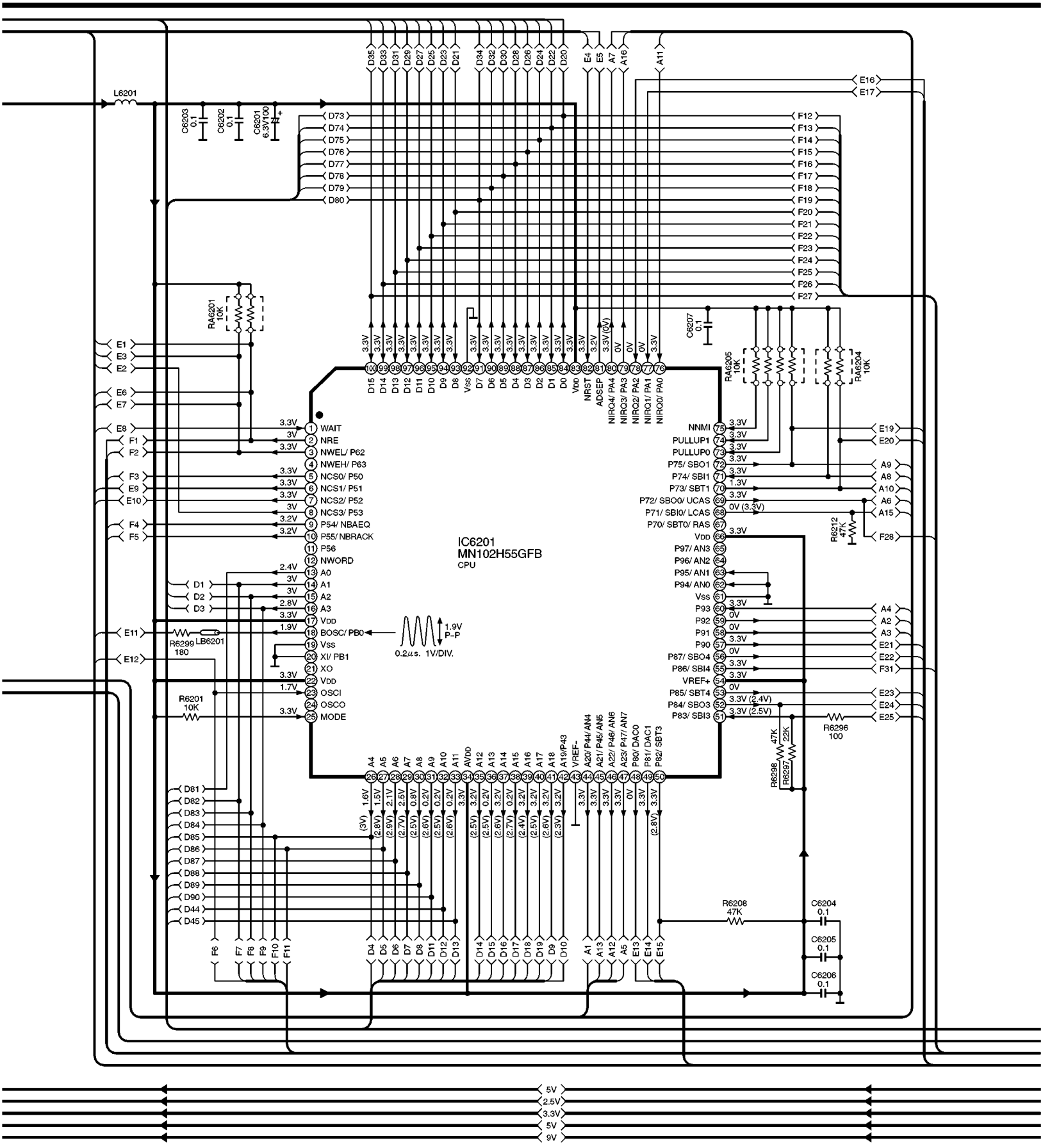
B DVD MODULE(1) CIRCUIT

: POSITIVE VOLTAGE LINE : VIDEO / AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-6

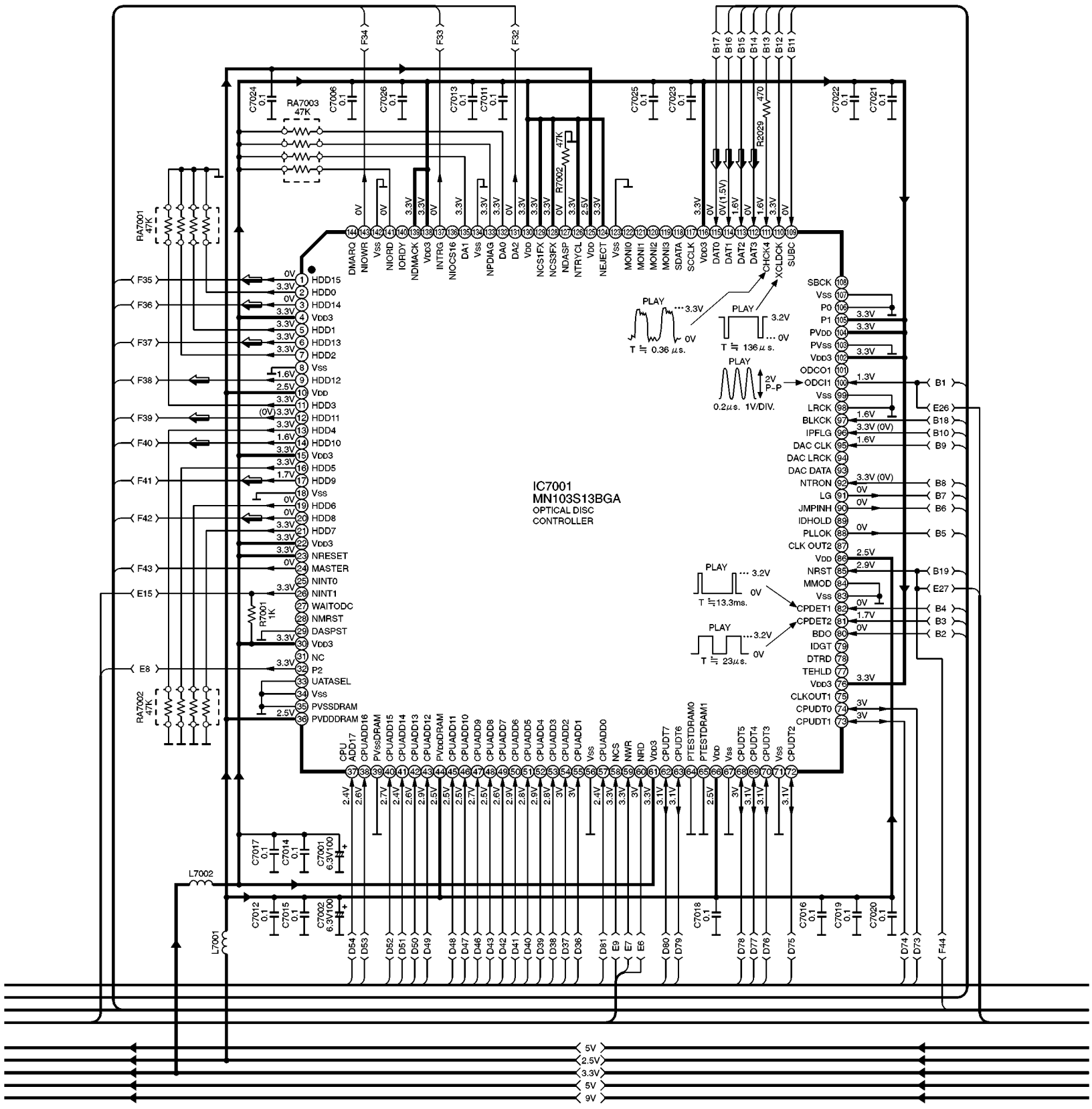
: POSITIVE VOLTAGE LINE



SCHEMATIC DIAGRAM-7

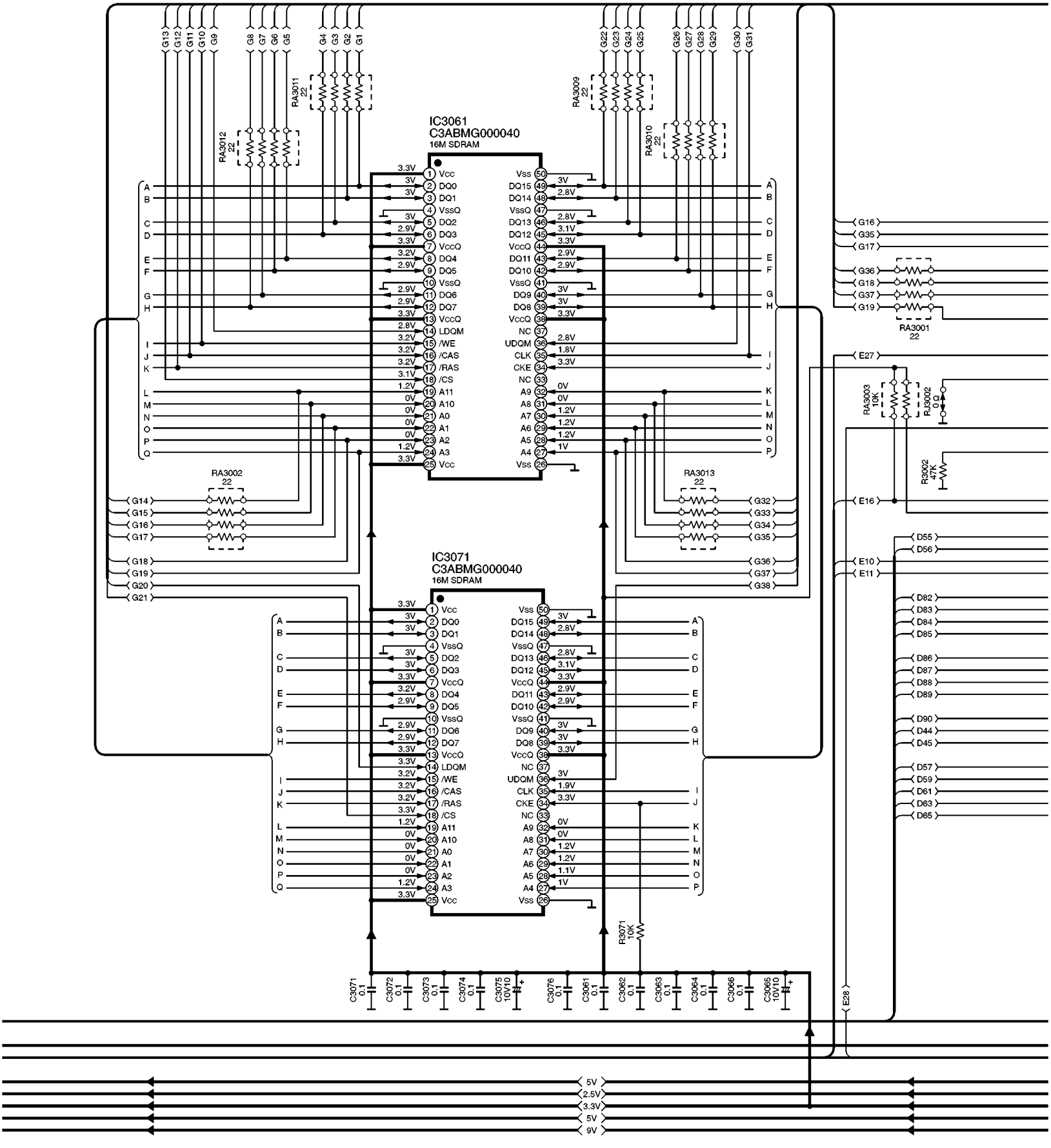
B DVD MODULE(1) CIRCUIT

: POSITIVE VOLTAGE LINE : VIDEO / AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-8

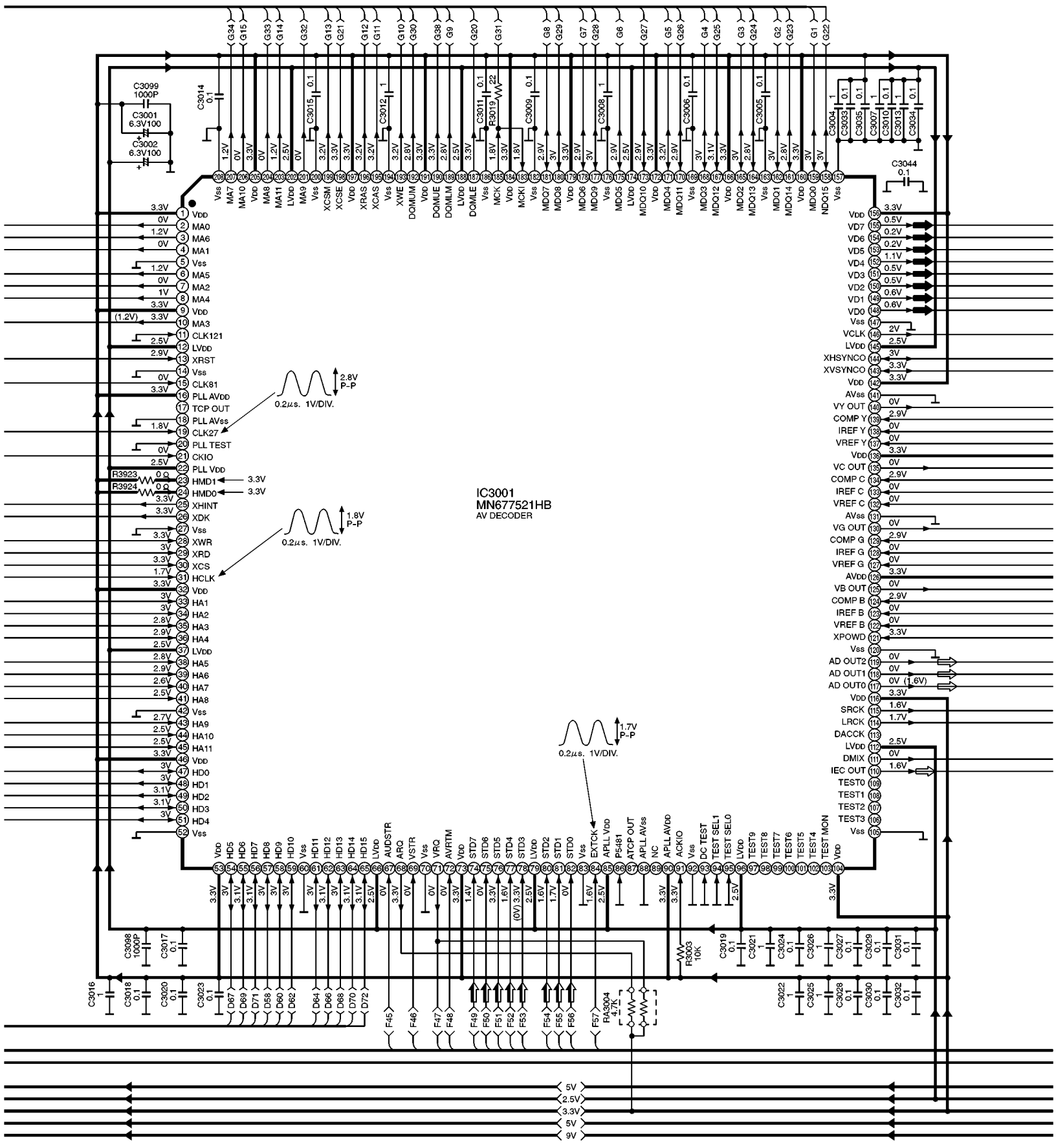
: POSITIVE VOLTAGE LINE



SCHEMATIC DIAGRAM-9

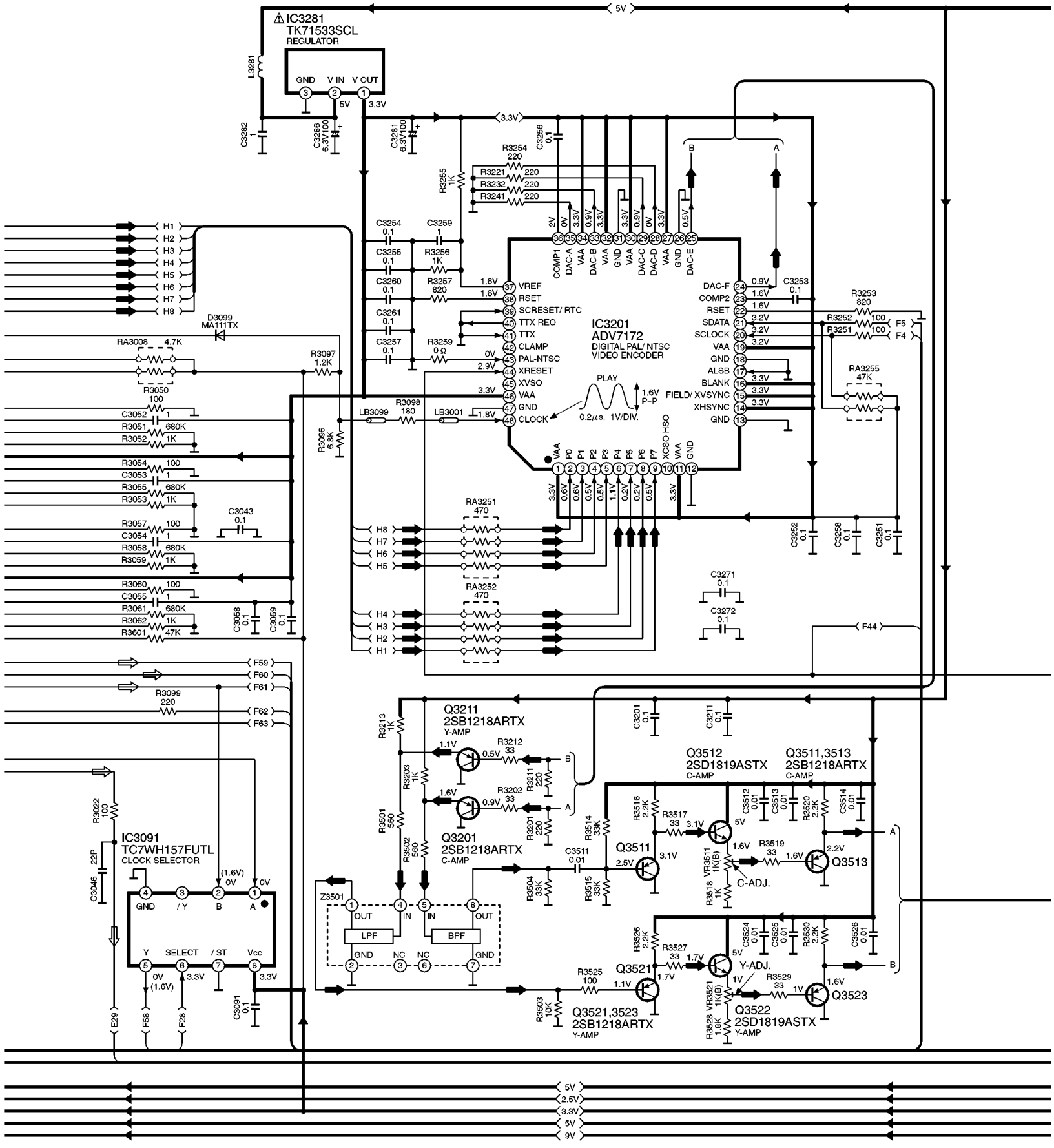
B DVD MODULE(1) CIRCUIT

: POSITIVE VOLTAGE LINE
: VIDEO / AUDIO SIGNAL LINE
: VIDEO SIGNAL LINE
: AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-10

: AUDIO SIGNAL LINE
: POSITIVE VOLTAGE LINE
: VIDEO SIGNAL LINE



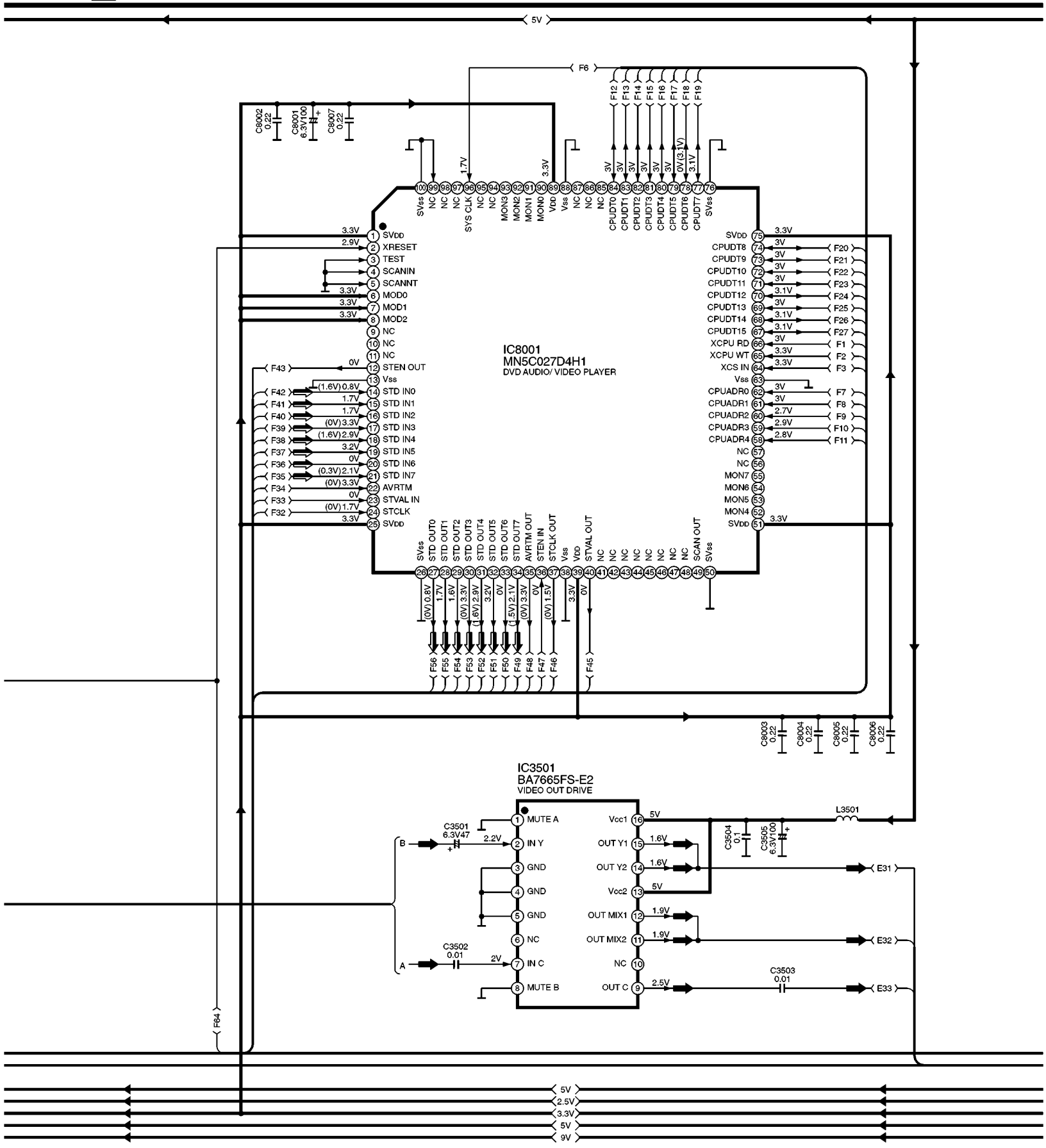
SCHEMATIC DIAGRAM-11

B DVD MODULE(1) CIRCUIT

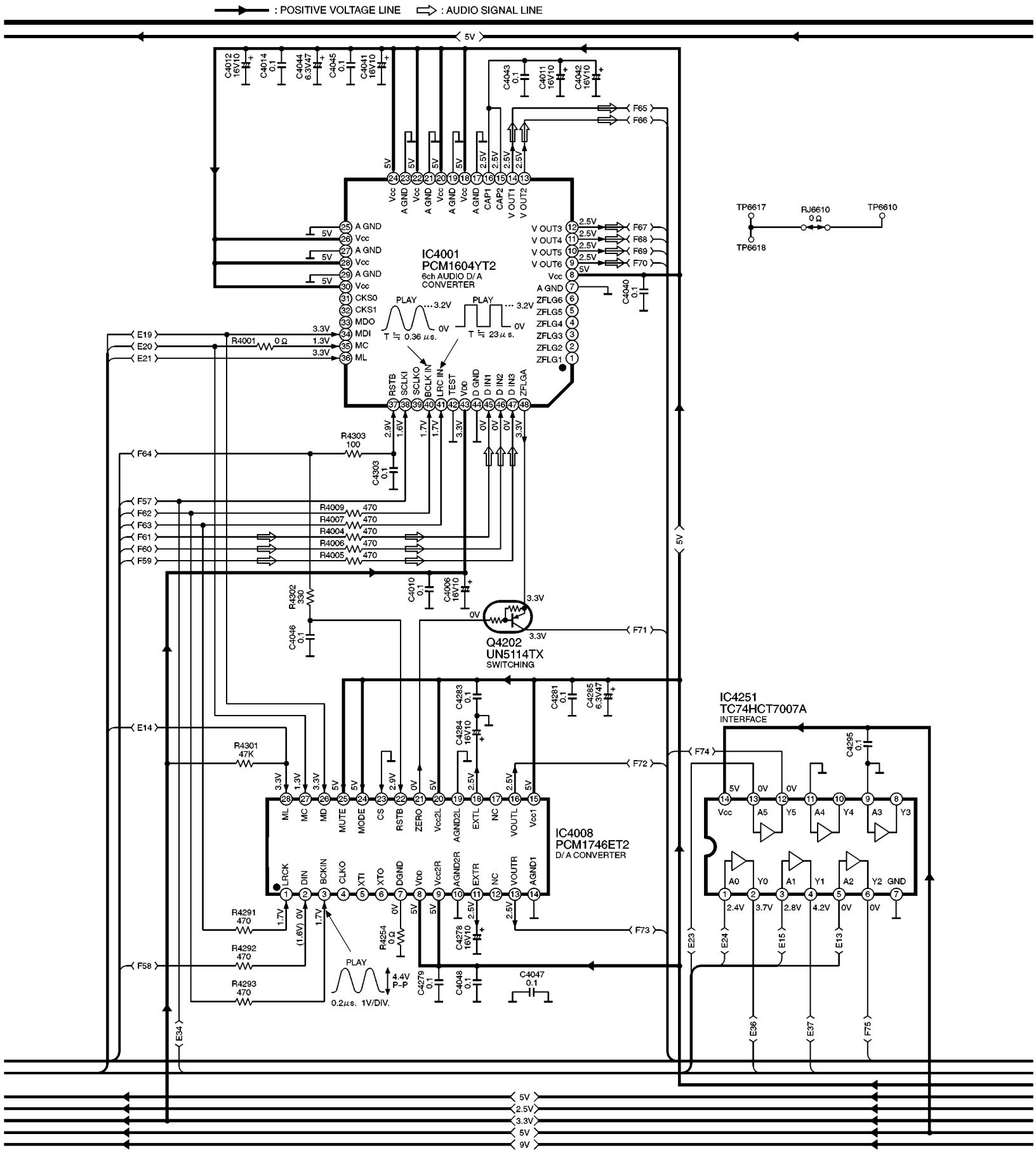
: POSITIVE VOLTAGE LINE

: VIDEO SIGNAL LINE

: VIDEO / AUDIO SIGNAL LINE



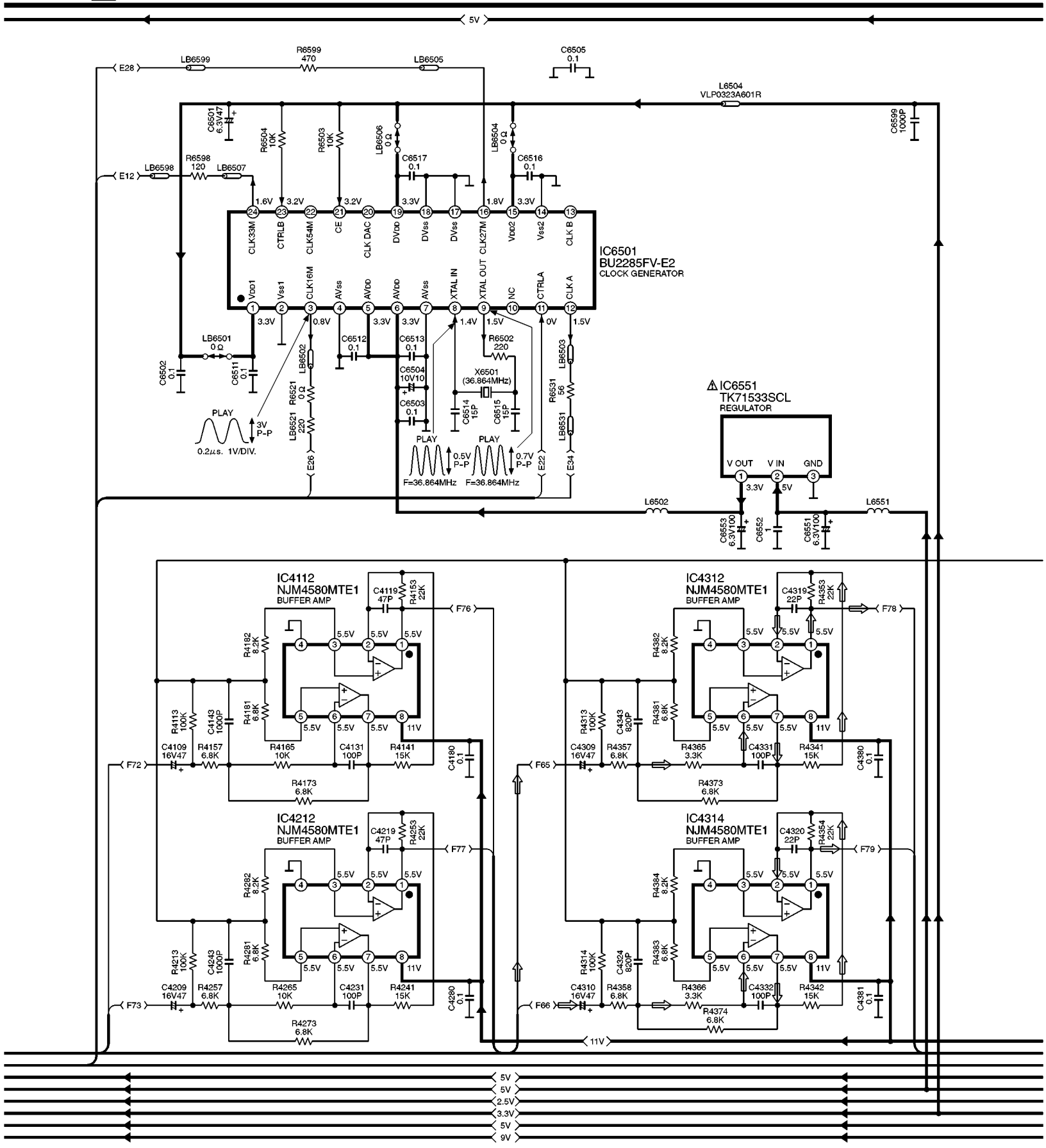
SCHEMATIC DIAGRAM-12



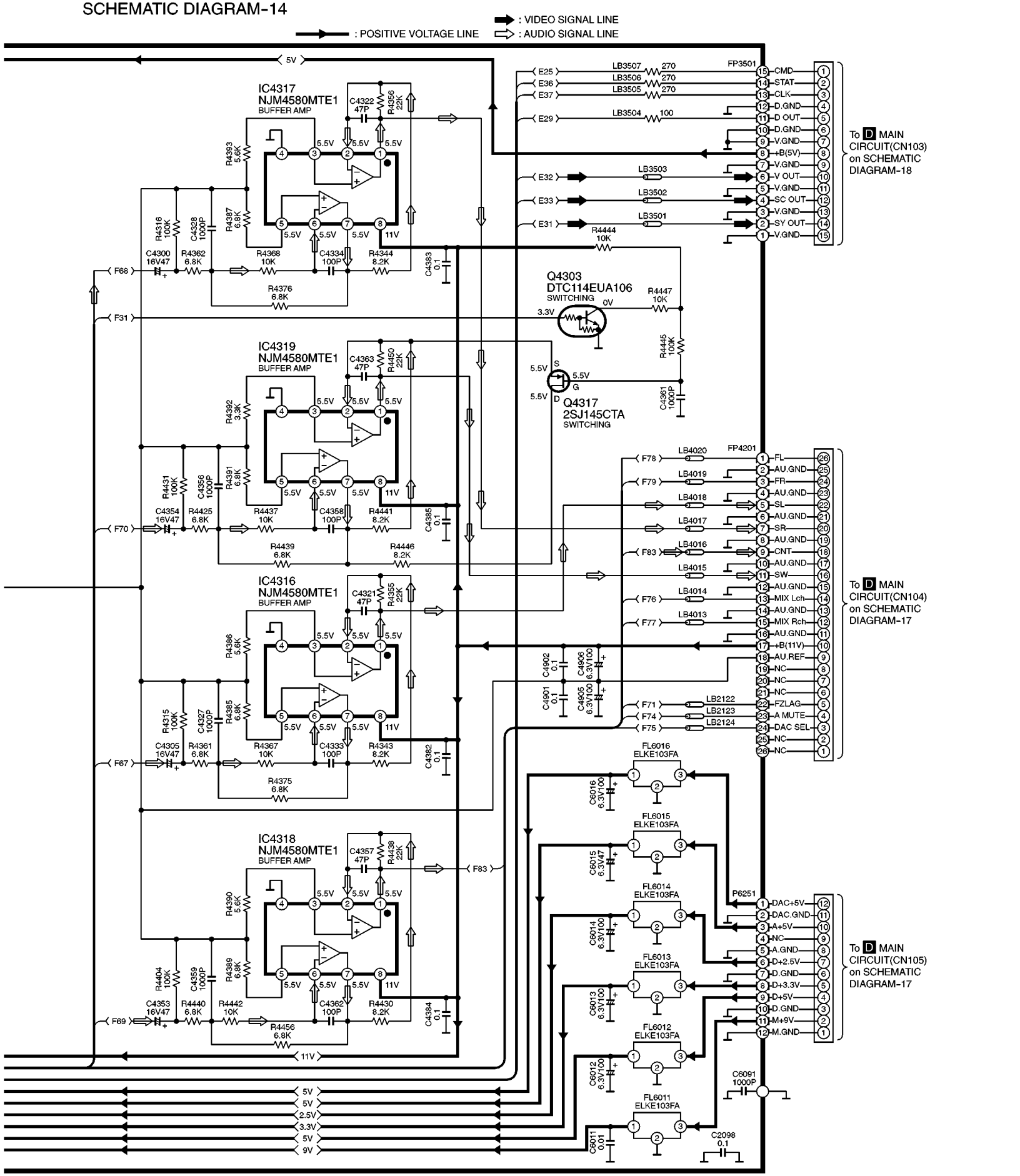
SCHEMATIC DIAGRAM-13

B DVD MODULE(1) CIRCUIT

: POSITIVE VOLTAGE LINE : AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-14

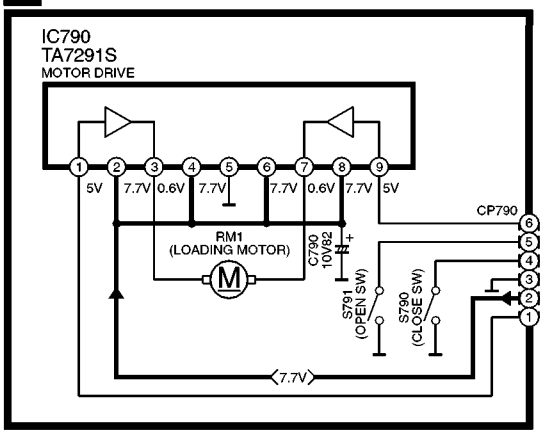


SCHEMATIC DIAGRAM-15

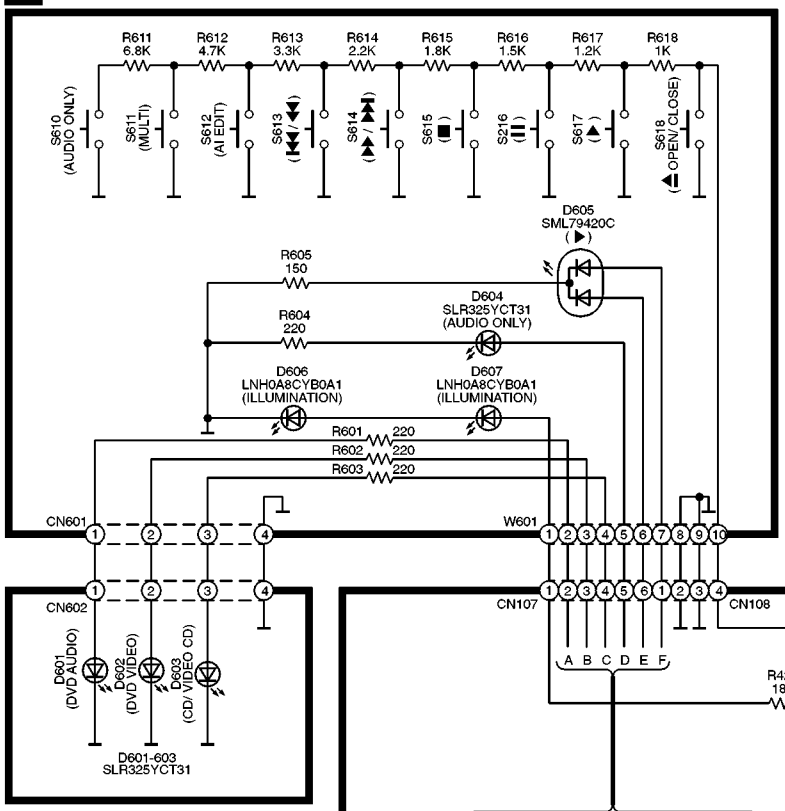
: POSITIVE VOLTAGE LINE

C LOADING MOTOR CIRCUIT

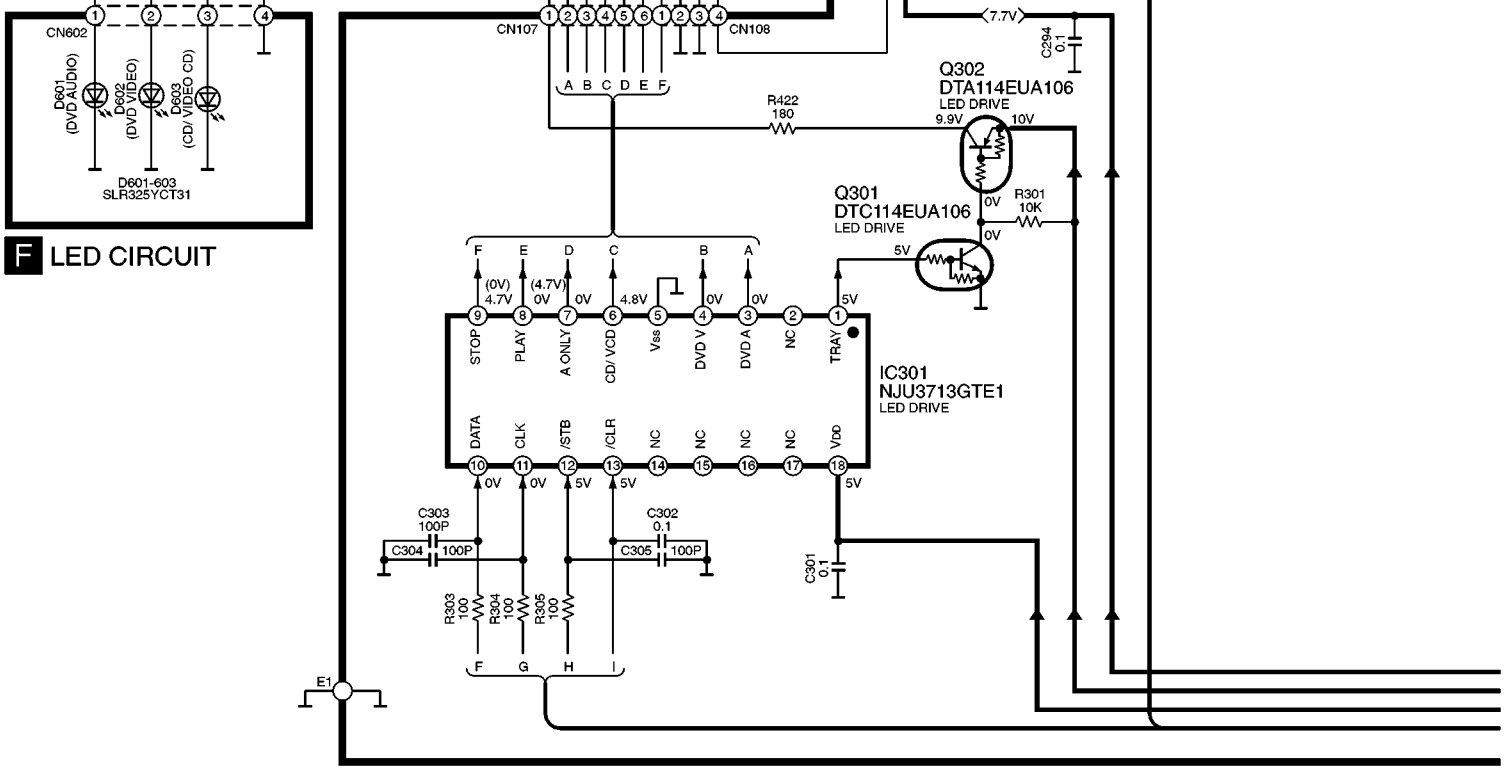
D MAIN CIRCUIT



E OPERATION CIRCUIT



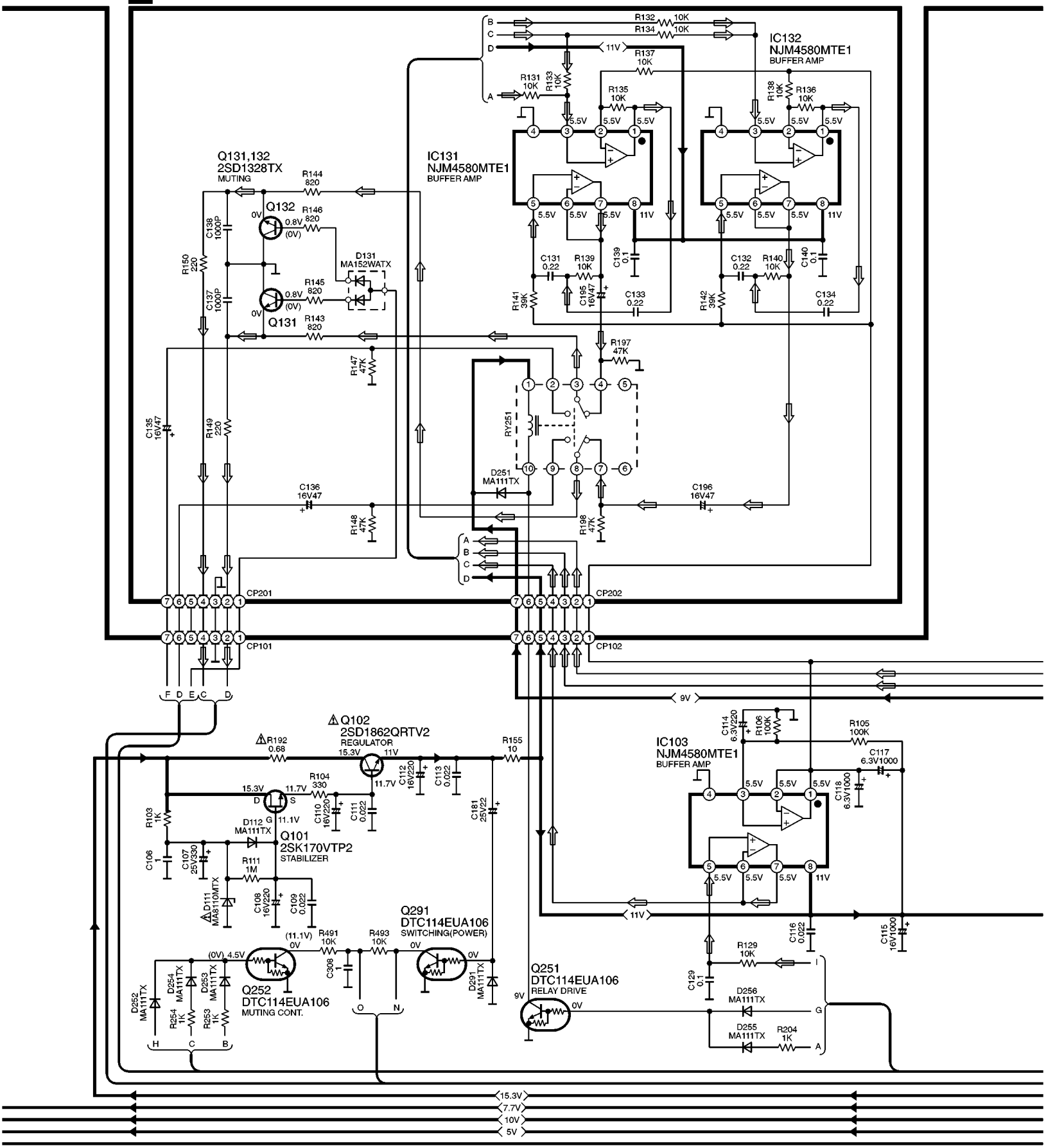
F LED CIRCUIT



SCHEMATIC DIAGRAM-16

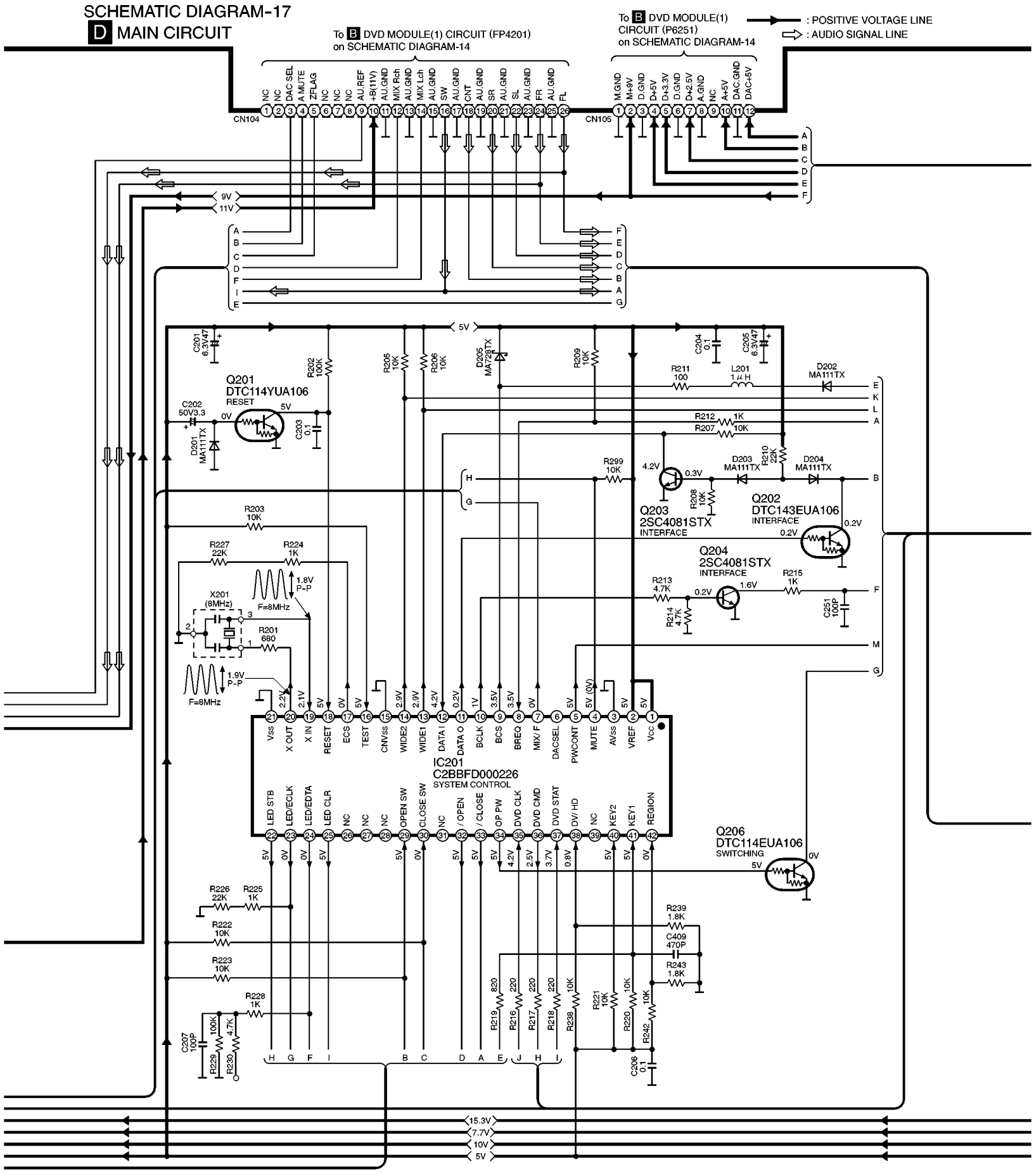
G BUFFER AMP CIRCUIT

: POSITIVE VOLTAGE LINE : AUDIO SIGNAL LINE

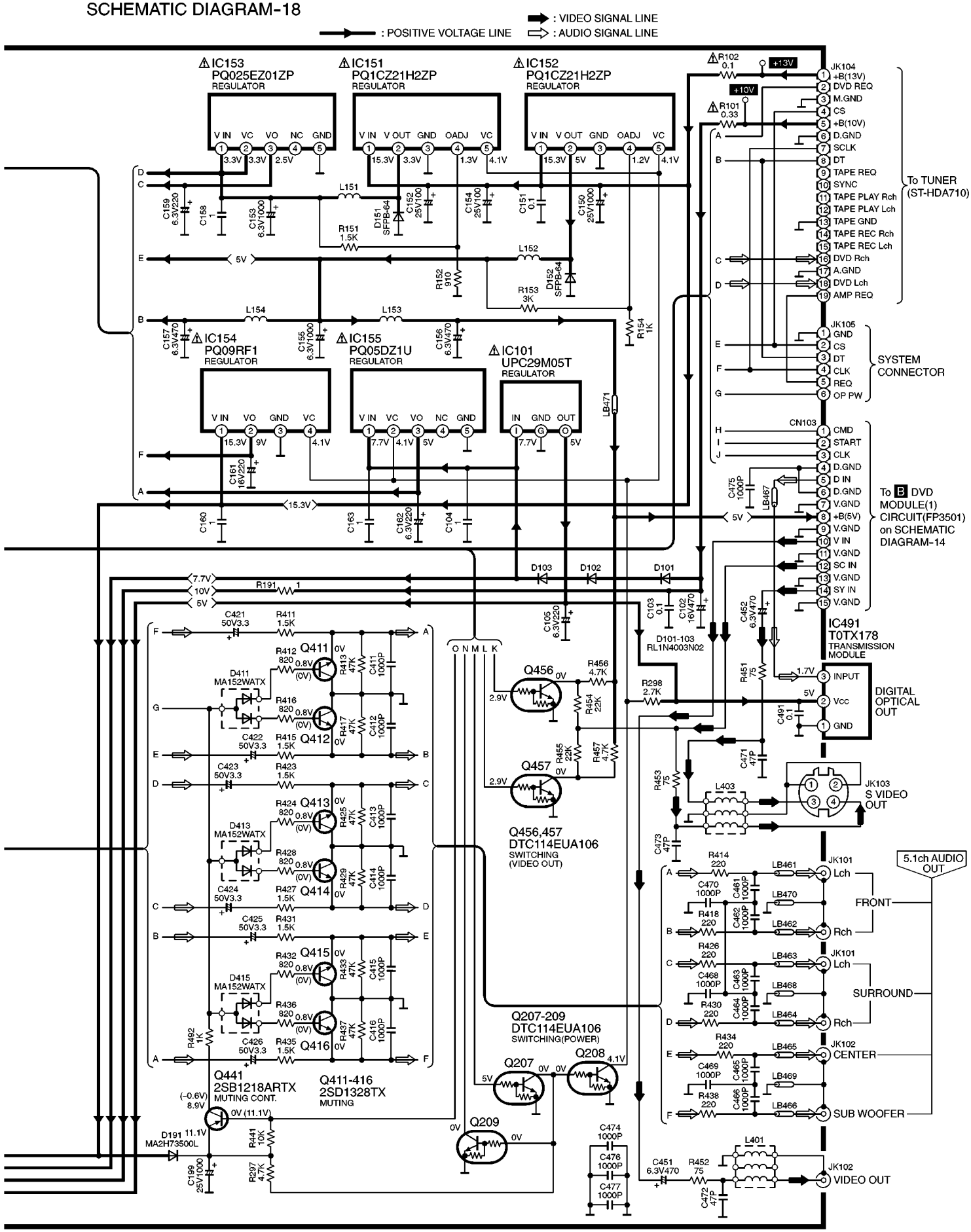


SCHEMATIC DIAGRAM-17

D MAIN CIRCUIT

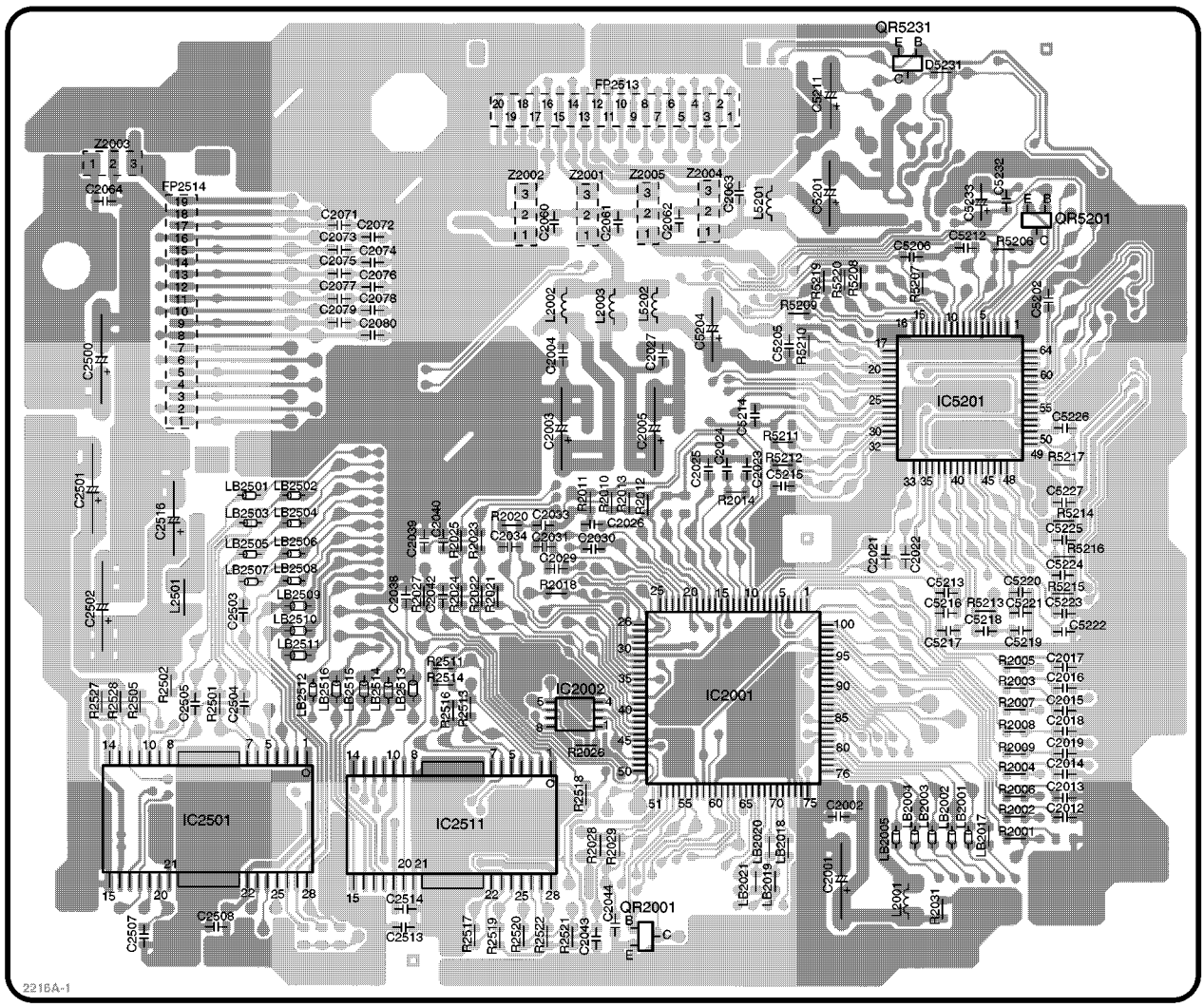


SCHEMATIC DIAGRAM-18



15 Printed Circuit Board Diagram

A DVD MODULE(2) P.C.B. (SIDE : A)



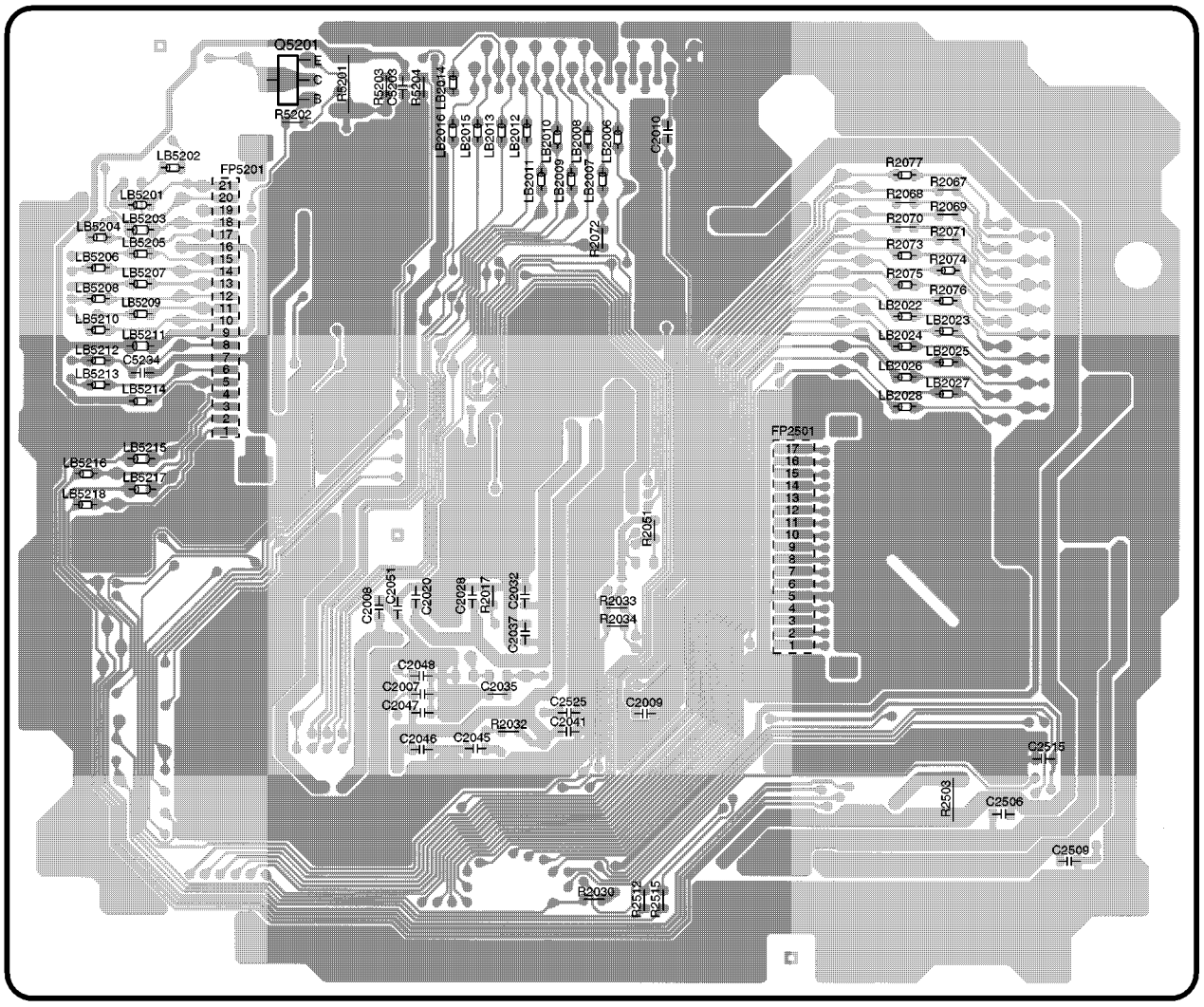
(REP2981A-1N)

■ ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
A DVD MODULE(2) P.C.B. (SIDE: A)																			
IC2001	4D	Z2005	2D	LB2507	4B	R2010	3D	R2505	4A	R5212	3D	C2018	4F	C2044	5D	C2503	4B	C5217	4E
IC2002	4C	FP2513	2D	LB2508	4B	R2011	3C	R2511	4C	R5213	4E	C2019	5F	C2060	2C	C2504	4B	C5218	4E
IC2501	5B	FP2514	2B	LB2509	4B	R2012	3D	R2513	4C	R5214	3F	C2021	4E	C2061	2D	C2505	4B	C5219	4F
IC2511	5C	LB2001	5E	LB2510	4B	R2013	3D	R2514	4C	R5215	4F	C2022	4E	C2062	2D	C2507	5A	C5220	4F
IC5201	3E	LB2002	5E	LB2511	4B	R2014	3D	R2516	4C	R5216	4F	C2023	3D	C2063	2D	C2508	5B	C5221	4F
QR2001	5D	LB2003	5E	LB2512	4B	R2018	4C	R2517	5C	R5217	3F	C2024	3D	C2064	2A	C2513	5C	C5222	4F
QR5201	2F	LB2004	5E	LB2513	4C	R2020	4C	R2518	5C	R5219	2E	C2025	3D	C2071	2B	C2514	5C	C5223	4F
QR5231	1E	LB2005	5E	LB2514	4C	R2021	4C	R2519	5C	R5220	2E	C2026	4D	C2072	2B	C2516	3B	C5224	4F
D5231	1E	LB2017	5E	LB2515	4B	R2022	4C	R2520	5C	C2001	5E	C2027	3D	C2073	2B	C5201	2E	C5225	4F
L2001	5E	LB2018	5D	LB2516	4B	R2023	4C	R2521	5C	C2002	5E	C2029	4C	C2074	2B	C5202	2F	C5226	3F
L2002	2C	LB2019	5D	R2001	5F	R2024	4C	R2522	5C	C2003	3C	C2030	4C	C2075	2B	C5204	3D	C5227	3F
L2003	2D	LB2020	5D	R2002	5F	R2025	4C	R2527	4A	C2004	3C	C2031	4C	C2076	2B	C5205	3D	C5232	2E
L2501	4B	LB2021	5D	R2003	4F	R2026	5C	R2528	4A	C2005	3D	C2033	4C	C2077	2B	C5206	2E	C5233	2E
L5201	2D	LB2501	3B	R2004	5F	R2027	4C	R5206	2E	C2012	5F	C2034	4C	C2078	2B	C5211	1E		
L5202	2D	LB2502	3B	R2005	4F	R2028	5D	R5207	2E	C2013	5F	C2038	4C	C2079	3B	C5212	2E		
Z2001	2C	LB2503	3B	R2006	5F	R2029	5D	R5208	2E	C2014	5F	C2039	4C	C2080	3B	C5213	4E		
Z2002	2C	LB2504	3B	R2007	4F	R2031	5E	R5209	2D	C2015	4F	C2040	4C	C2500	3A	C5214	3D		
Z2003	2A	LB2505	4B	R2008	4F	R2501	4B	R5210	3E	C2016	4F	C2042	4C	C2501	3A	C5215	3D		
Z2004	2D	LB2506	4B	R2009	5F	R2502	4A	R5211	3D	C2017	4F	C2043	5D	C2502	4A	C5216	4E		

G H I J K L

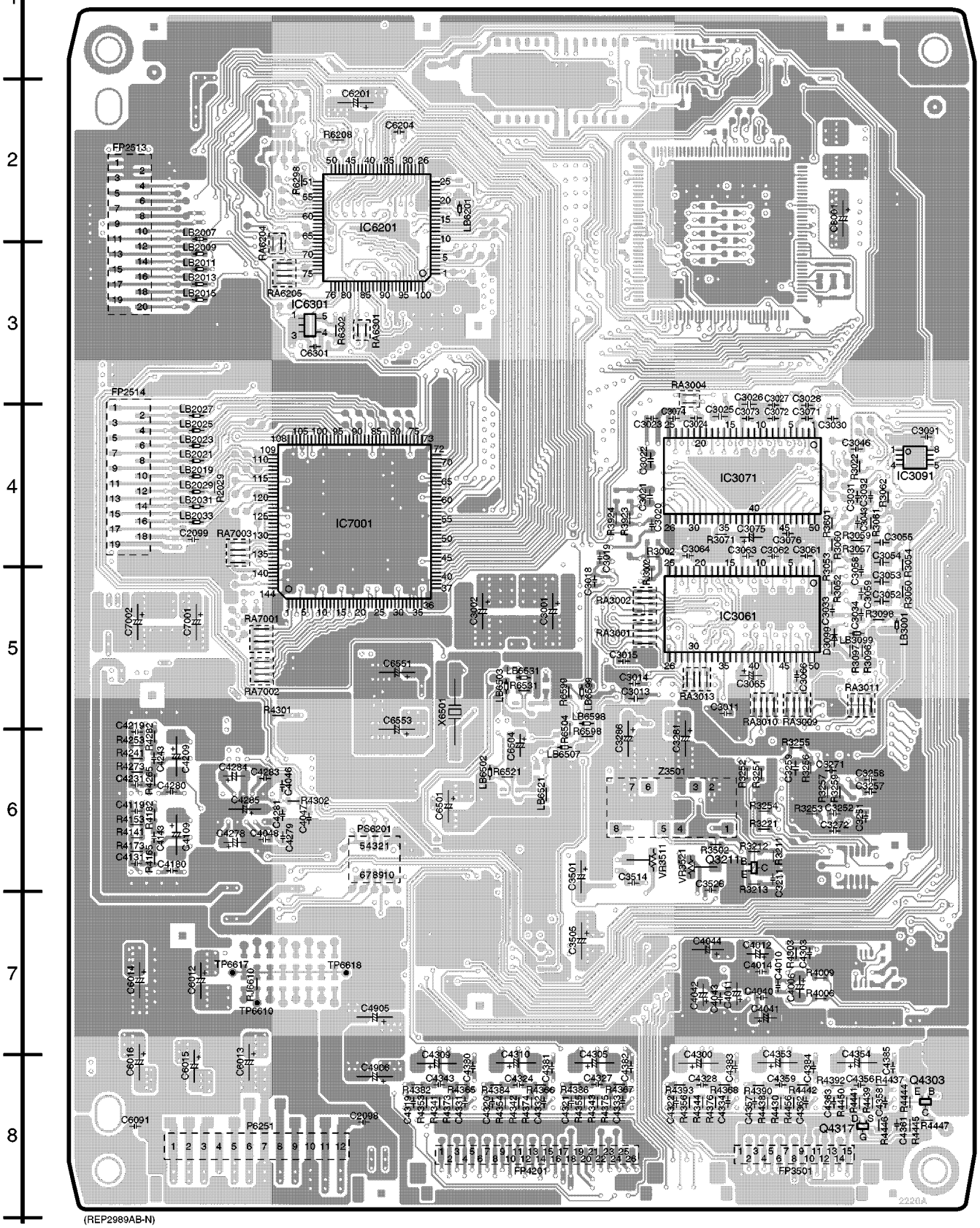
A DVD MODULE(2) P.C.B. (SIDE : B)



■ ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
A DVD MODULE(2) P.C.B. (SIDE: B)															
Q5201	1H	LB2014	1I	LB5202	2G	LB5213	3G	R2051	4J	R2077	2K	C2010	2J	C2051	4H
FP2501	3J	LB2015	2I	LB5203	2G	LB5214	3G	R2067	2K	R2503	5K	C2020	4I	C2506	5K
FP5201	2H	LB2016	2I	LB5204	2G	LB5215	3G	R2068	2K	R2512	5J	C2028	4I	C2509	5L
LB2006	2I	LB2022	3K	LB5205	2G	LB5216	3G	R2069	2K	R2515	5J	C2032	4I	C2515	5K
LB2007	2I	LB2023	3K	LB5206	2G	LB5217	3G	R2070	2K	R5201	1H	C2035	4I	C2525	4I
LB2008	2I	LB2024	3K	LB5207	2G	LB5218	3G	R2071	2K	R5202	2H	C2037	4I	C5203	1H
LB2009	2I	LB2025	3K	LB5208	2G	R2017	4I	R2072	2I	R5203	1H	C2041	4I	C5234	3G
LB2010	2I	LB2026	3K	LB5209	2G	R2030	5I	R2073	2K	R5204	1I	C2045	5I		
LB2011	2I	LB2027	3K	LB5210	3G	R2032	4I	R2074	2K	C2007	4I	C2046	5I		
LB2012	2I	LB2028	3K	LB5211	3G	R2033	4I	R2075	2K	C2008	4H	C2047	4I		
LB2013	2I	LB5201	2G	LB5212	3G	R2034	4I	R2076	2K	C2009	4J	C2048	4I		

B DVD MODULE(1) P.C.B. (SIDE : A)



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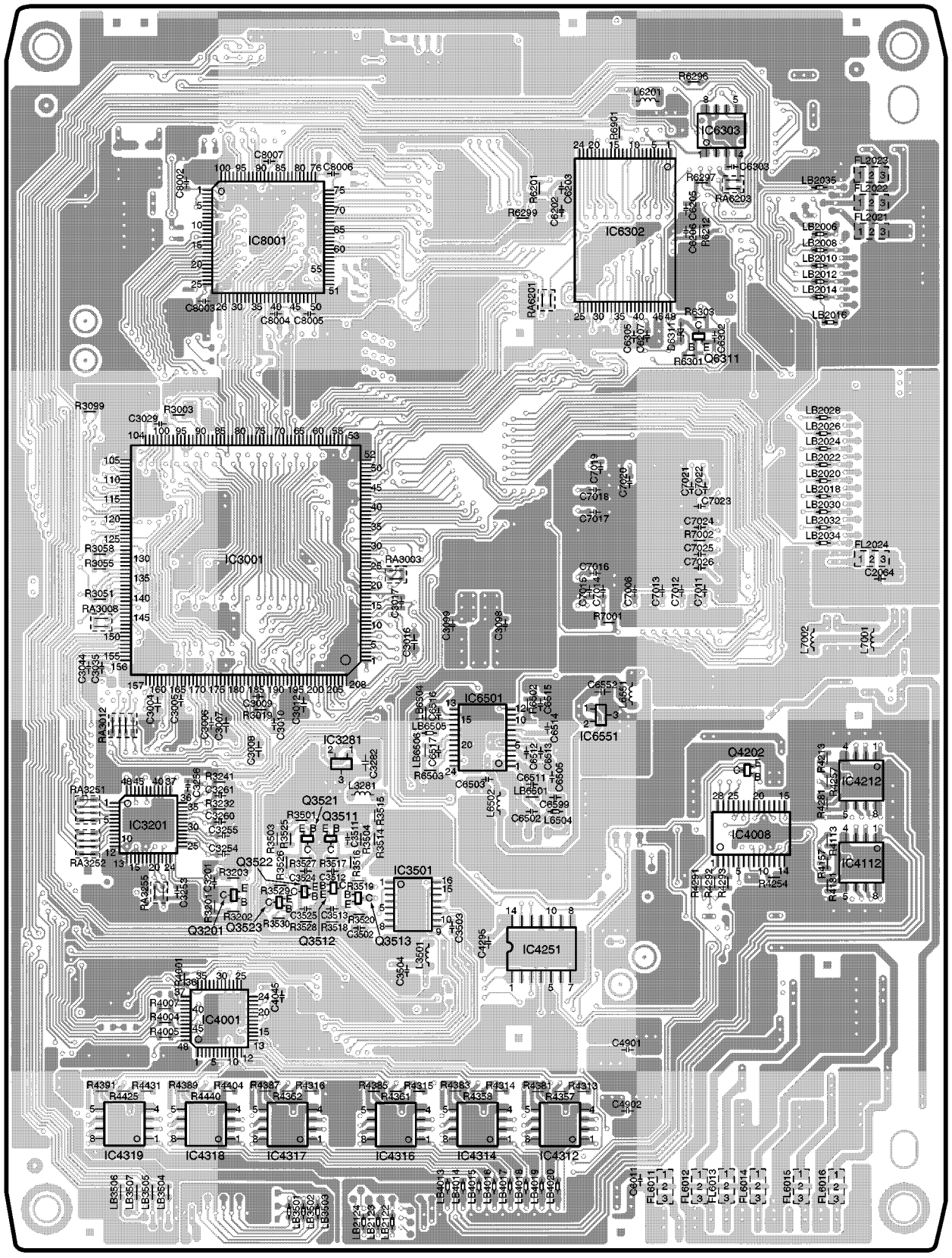
B DVD MODULE(1) P.C.B. (SIDE : B)



■ ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
B DVD MODULE(1) P.C.B. (SIDE: A)															
IC3061	5E	LB6507	6D	R3211	6E	R4354	8C	R6599	5D	C3062	4E	C4046	6B	C4353	8E
IC3071	4E	LB6521	6D	R3212	6E	R4355	8D	RJ3002	5D	C3063	4E	C4047	6B	C4354	8F
IC3091	4F	LB6531	5D	R3213	6E	R4356	8E	RJ6610	7B	C3064	4E	C4048	6B	C4356	8F
IC6201	2C	LB6598	5D	R3221	6E	R4365	8C	C2098	8C	C3065	5E	C4109	6A	C4357	8E
IC6301	3B	LB6599	5D	R3251	6E	R4366	8D	C2099	4B	C3066	5E	C4119	6A	C4358	8F
IC7001	4C	P6251	8B	R3252	6E	R4367	8D	C3001	5D	C3071	4E	C4131	6A	C4359	8E
Q3211	6E	PS6201	6C	R3253	6E	R4368	8E	C3002	5C	C3072	4E	C4143	6A	C4361	8F
Q4303	8F	RA3001	5D	R3254	6E	R4373	8C	C3011	5E	C3073	4E	C4180	6A	C4362	8E
Q4317	8F	RA3002	5D	R3255	6E	R4374	8D	C3013	5D	C3074	4E	C4209	6A	C4363	8E
D3099	5E	RA3004	3E	R3256	6E	R4375	8D	C3014	5D	C3075	4E	C4219	6A	C4380	8C
VR3511	6D	RA3009	5E	R3257	6E	R4376	8E	C3015	5D	C3076	4E	C4231	6A	C4381	8D
VR3521	6E	RA3010	5E	R3259	6F	R4382	8C	C3018	5D	C3091	4F	C4243	6A	C4382	8D
Z3501	6E	RA3011	5F	R3502	6E	R4384	8C	C3019	4D	C3211	6E	C4278	6B	C4383	8E
X6501	5C	RA3013	5E	R3601	4E	R4386	8D	C3020	4D	C3251	6F	C4279	6B	C4384	8E
FP2513	2A	RA6204	3B	R3923	4D	R4390	8E	C3021	4D	C3252	6F	C4280	6A	C4385	8F
FP2514	4A	RA6205	3B	R3924	4D	R4392	8F	C3022	4D	C3257	6F	C4281	6B	C4905	7C
FP3501	8E	RA6301	3C	R4006	7E	R4393	8E	C3023	4D	C3258	6F	C4283	6B	C4906	8C
FP4201	8D	RA7001	5B	R4009	7E	R4430	8E	C3024	4E	C3259	6E	C4284	6B	C6012	7B
LB2007	2B	RA7002	5B	R4141	6A	R4437	8F	C3025	4E	C3271	6E	C4285	6B	C6013	8B
LB2009	3B	RA7003	4B	R4153	6A	R4438	8E	C3026	3E	C3272	6F	C4300	8E	C6014	7A
LB2011	3B	R2029	4B	R4165	6A	R4439	8F	C3027	3E	C3281	6E	C4303	7E	C6015	8B
LB2013	3B	R3002	4D	R4173	6A	R4441	8F	C3028	3E	C3286	6D	C4305	8D	C6016	8A
LB2015	3B	R3022	4F	R4182	6A	R4442	8E	C3030	4E	C3501	6D	C4309	8C	C6091	8A
LB2019	4B	R3050	5F	R4241	6A	R4444	8F	C3031	4F	C3505	7D	C4310	8D	C6201	2C
LB2021	4B	R3052	5F	R4253	6A	R4445	8F	C3032	4F	C3514	6D	C4319	8C	C6204	2C
LB2023	4B	R3053	4E	R4265	6A	R4446	8F	C3033	5E	C3526	6E	C4320	8C	C6301	3B
LB2025	4B	R3054	4F	R4273	6A	R4447	8F	C3034	5F	C4006	7E	C4321	8D	C6501	6C
LB2027	4B	R3057	4F	R4282	6A	R4450	8F	C3043	4F	C4010	7E	C4322	8E	C6504	6D
LB2029	4B	R3059	4F	R4301	5B	R4456	8E	C3046	4F	C4011	7E	C4324	8D	C6551	5C
LB2031	4B	R3060	4F	R4302	6B	R6208	2B	C3052	5F	C4012	7E	C4327	8D	C6553	5C
LB2033	4B	R3061	4F	R4303	7E	R6298	2B	C3053	5F	C4014	7E	C4328	8E	C7001	5B
LB3001	5F	R3062	4F	R4341	8C	R6302	3B	C3054	4F	C4040	7E	C4331	8C	C7002	5A
LB3099	5F	R3071	4E	R4342	8D	R6504	5D	C3055	4F	C4041	7E	C4332	8D	C8001	2F
LB6201	2C	R3096	5F	R4343	8D	R6521	6C	C3058	5F	C4042	7E	C4333	8D		
LB6502	6C	R3097	5F	R4344	8E	R6531	5D	C3059	5F	C4043	7E	C4334	8E		
LB6503	5C	R3098	5F	R4353	8C	R6598	6D	C3061	4E	C4044	7E	C4343	8C		
B DVD MODULE(1) P.C.B. (SIDE: B)															
IC3001	4H	L3501	7I	LB2034	4L	RA6203	2K	R4007	7H	R6296	2K	C3260	6H	C6515	5J
IC3201	6H	L6201	2K	LB2035	2L	R3003	3H	R4113	6L	R6297	2K	C3261	6H	C6516	5I
IC3281	6I	L6502	6J	LB2122	8I	R3019	5H	R4157	6L	R6299	2J	C3282	6I	C6517	5I
IC3501	6I	L6504	6J	LB2123	8I	R3051	5G	R4181	6L	R6301	3K	C3502	7I	C6552	5J
IC4001	7H	L6551	5J	LB2124	8I	R3055	4G	R4213	6L	R6303	3K	C3503	7I	C6599	6J
IC4008	6K	L7001	5L	LB3501	8H	R3058	4G	R4254	6K	R6502	5J	C3504	7I	C7006	5J
IC4112	6L	L7002	5L	LB3502	8I	R3099	3G	R4257	6L	R6503	6I	C3511	6I	C7011	5K
IC4212	6L	FL2021	2L	LB3503	8I	R3201	6H	R4281	6L	R6901	2J	C3512	6I	C7012	5K
IC4251	7J	FL2022	2L	LB3504	8H	R3202	6H	R4291	6K	R7001	5J	C3513	6I	C7013	5K
IC4312	8J	FL2023	2L	LB3505	8H	R3203	6H	R4292	6K	R7002	4K	C3524	6I	C7014	5J
IC4314	8J	FL2024	4L	LB3506	8G	R3232	6H	R4293	6K	C2064	4L	C3525	6I	C7015	5J
IC4316	8I	FL6011	8K	LB3507	8H	R3241	6H	R4313	7J	C3004	5H	C4045	7H	C7016	4J
IC4317	8H	FL6012	8K	LB4013	8I	R3501	6H	R4314	7J	C3005	5H	C4295	7J	C7017	4J
IC4318	8H	FL6013	8K	LB4014	8I	R3503	6H	R4315	7I	C3006	5H	C4901	7J	C7018	4J
IC4319	8G	FL6014	8K	LB4015	8J	R3504	6I	R4316	7I	C3007	5H	C4902	8J	C7019	4J
IC6302	2J	FL6015	8K	LB4016	8J	R3514	6I	R4357	8J	C3008	5H	C6011	8J	C7020	4J
IC6303	2K	FL6016	8L	LB4017	8J	R3515	6I	R4358	8J	C3009	5H	C6202	2J	C7021	4K
IC6501	5J	LB2006	2L	LB4018	8J	R3516	6I	R4361	8I	C3010	5H	C6203	2J	C7022	4K
IC6551	5J	LB2008	3L	LB4019	8J	R3517	6I	R4362	8H	C3012	5H	C6205	2K	C7023	4K
IC8001	2H	LB2010	3L	LB4020	8J	R3518	7I	R4381	7J	C3016	5I	C6206	2K	C7024	4K
Q3201	6H	LB2012	3L	LB6501	6J	R3519	6I	R4383	7I	C3017	5I	C6207	3K	C7025	4K
Q3511	6I	LB2014	3L	LB6504	5I	R3520	6I	R4385	7I	C3029	4H	C6302	3K	C7026	4K
Q3512	6I	LB2016	3L	LB6505	5I	R3525	6H	R4387	7H	C3035	5G	C6303	2K	C8002	2H
Q3513	6I	LB2018	4L	LB6506	5I	R3526	6H	R4389	7H	C3044	5G	C6305	3J	C8003	3H
Q3521	6I	LB2020	4L	RA3003	4I	R3527	6I	R4391	7G	C3098	5J	C6502	6J	C8004	3H
Q3522	6I	LB2022	4L	RA3008	5G	R3528	7I	R4404	7H	C3099	5I	C6503	6J	C8005	3I
Q3523	6H	LB2024	4L	RA3012	5G	R3529	6H	R4425	8G	C3201	6H	C6505	6J	C8006	2I
Q4202	6K	LB2026	4L	RA3251	6G	R3530	6H	R4431	7H	C3253	6H	C6511	6J	C8007	2H
Q6311	3K	LB2028	4L	RA3252	6G	R4001	7H	R4440	8H	C3254	6H	C6512	6J		
D6311	3K	LB2030	4L	RA3255	6H	R4004	7H	R6201	2J	C3255	6H	C6513	6J		
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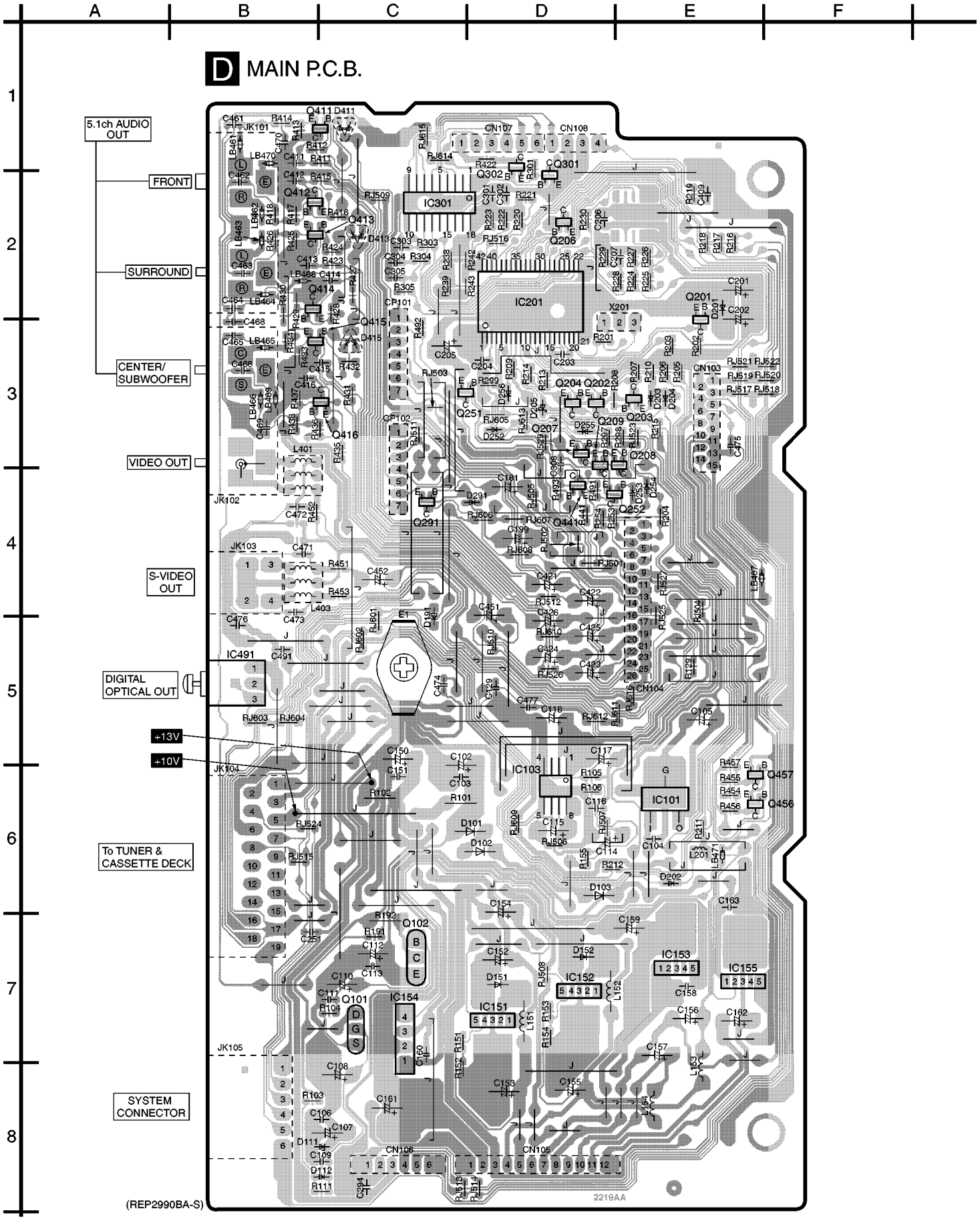
D MAIN P.C.B.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CENTER/ SUBWOOFER
VIDEO OUT
S-VIDEO OUT
DIGITAL OPTICAL OUT
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+10V
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SYSTEM CONNECTOR
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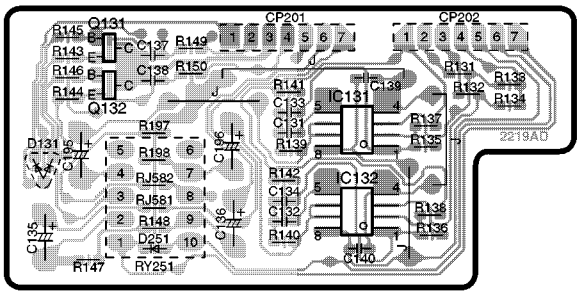
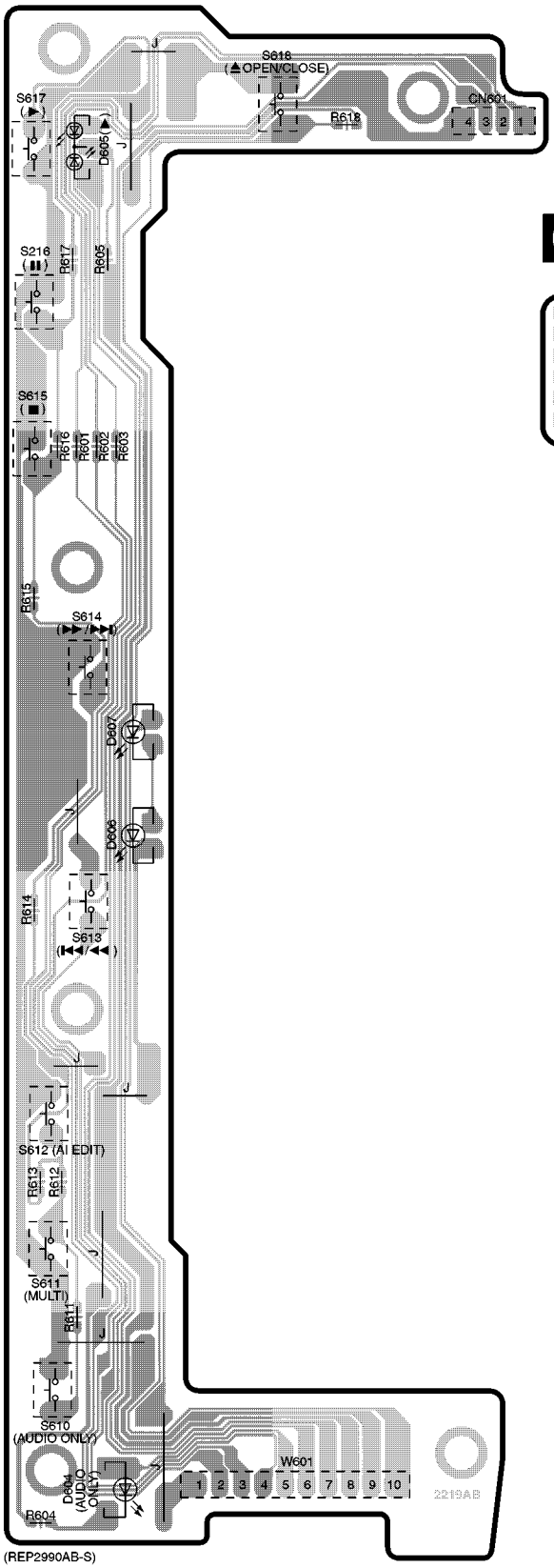


(REP2990BA-S)

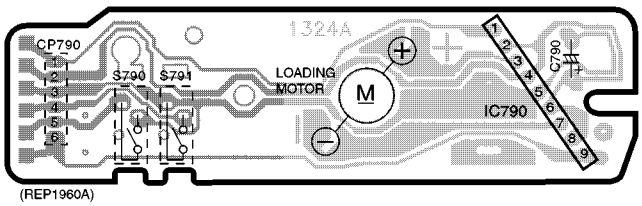
■ ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
D MAIN P.C.B.											
IC101	6E	D291	4D	R201	3D	R423	2C	RJ526	5D	C199	4D
IC103	6D	D411	1C	R202	3E	R424	2C	RJ527	4E	C201	2E
IC151	7D	D413	2C	R203	3E	R425	2B	RJ529	3D	C202	2E
IC152	7D	D415	3C	R204	4E	R426	2B	RJ601	5C	C203	3D
IC153	7E	L151	7D	R205	3E	R427	2C	RJ602	5C	C204	3D
IC154	7C	L152	7D	R206	3E	R428	2C	RJ603	5B	C205	3C
IC155	7E	L153	8E	R207	3E	R429	2B	RJ604	5B	C206	2D
IC201	2D	L154	8E	R208	3D	R430	2B	RJ605	3D	C207	2E
IC301	2C	L201	6E	R209	3D	R431	3C	RJ606	4D	C251	7B
IC491	5B	L401	4B	R210	3E	R432	3C	RJ607	4D	C294	8C
Q101	7C	L403	4B	R211	6E	R433	3B	RJ608	4D	C301	2D
Q102	7C	X201	3E	R212	6D	R434	3B	RJ609	6D	C302	2D
Q201	2E	CN103	3E	R213	3D	R435	3C	RJ610	5D	C303	2C
Q202	3D	CN104	4E	R214	3D	R436	3C	RJ611	5E	C304	2C
Q203	3E	CN105	8D	R215	3E	R437	3B	RJ612	5D	C305	2C
Q204	3D	CN106	8C	R216	2E	R438	3B	RJ613	3D	C308	3D
Q206	2D	CN107	1D	R217	2E	R441	4D	RJ614	1C	C409	2E
Q207	3D	CN108	1D	R218	2E	R451	4C	RJ615	1C	C411	1B
Q208	3E	CP101	3C	R219	2E	R452	4B	RJ616	5E	C412	2B
Q209	3D	CP102	3C	R220	2D	R453	4C	C102	5C	C413	2B
Q251	3D	JK101	2B	R221	2D	R454	6E	C103	6C	C414	2C
Q252	4E	JK102	3B	R222	2D	R455	6E	C104	6E	C415	3C
Q291	4C	JK103	4B	R223	2D	R456	6E	C105	5E	C416	3B
Q301	2D	JK104	6B	R224	2E	R457	6E	C106	8C	C421	4D
Q302	1D	JK105	8B	R225	2E	R491	4D	C107	8C	C422	4D
Q411	1C	E1	5C	R226	2E	R492	3C	C108	8C	C423	5D
Q412	2B	LB461	1B	R227	2E	R493	4D	C109	8C	C424	5D
Q413	2B	LB462	2B	R228	2E	RJ501	4D	C110	7C	C425	5D
Q414	2B	LB463	2B	R229	2D	RJ502	4D	C111	7C	C426	5D
Q415	3B	LB464	2B	R230	2D	RJ503	3C	C112	7C	C451	4D
Q416	3C	LB465	3B	R238	2C	RJ504	4E	C113	7C	C452	4C
Q441	4D	LB466	3B	R239	2C	RJ505	4D	C114	6D	C461	1B
Q456	6E	LB467	4E	R242	2D	RJ506	6D	C115	6D	C462	2B
Q457	6E	LB468	2B	R243	2D	RJ507	6D	C116	6D	C463	2B
D101	6D	LB469	3B	R253	4D	RJ508	7D	C117	5D	C464	2B
D102	6D	LB470	1B	R254	4D	RJ509	2C	C118	5D	C465	3B
D103	6D	LB471	6E	R297	3D	RJ510	5D	C129	5D	C466	3B
D111	8C	R101	6C	R298	3E	RJ511	3C	C150	5C	C468	3B
D112	8C	R102	6C	R299	3D	RJ512	4D	C151	6C	C469	3B
D151	7D	R103	8B	R301	1D	RJ513	8C	C152	7D	C470	1B
D152	7E	R104	7C	R303	2C	RJ514	8D	C153	8D	C471	4B
D191	5C	R105	6D	R304	2C	RJ515	6B	C154	6D	C472	4B
D201	2E	R106	6D	R305	2C	RJ516	2D	C155	8D	C473	4B
D202	6E	R111	8C	R411	1C	RJ517	3E	C156	7E	C474	5C
D203	3E	R129	5E	R412	1B	RJ518	3F	C157	7E	C475	3E
D204	3E	R151	7C	R413	1B	RJ519	3E	C158	7E	C476	5B
D205	3D	R152	8C	R414	1B	RJ520	3F	C159	7E	C477	5D
D252	3D	R153	7D	R415	2C	RJ521	3E	C160	7C	C491	5B
D253	4E	R154	7D	R416	2C	RJ522	3F	C161	8C		
D254	4E	R155	6D	R417	2B	RJ523	3E	C162	7E		
D255	3D	R191	7C	R418	2B	RJ524	6B	C163	6E		
D256	3D	R192	7C	R422	1D	RJ525	5E	C181	4D		
G BUFFER AMP P.C.B.											
IC131	2I	RY251	2H	R138	2I	R146	2G	RJ582	2H	C138	2H
IC132	2I	R131	2I	R139	2H	R147	2H	C131	2H	C139	2I
Q131	1H	R132	2I	R140	2H	R148	2H	C132	2H	C140	2I
Q132	2H	R133	2I	R141	2H	R149	1H	C133	2H	C195	2H
D131	2G	R134	2I	R142	2H	R150	2H	C134	2H	C196	2H
D251	2H	R135	2I	R143	2G	R197	2H	C135	2G		
CP201	1H	R136	2I	R144	2G	R198	2H	C136	2H		
CP202	1I	R137	2I	R145	1G	RJ581	2H	C137	2H		

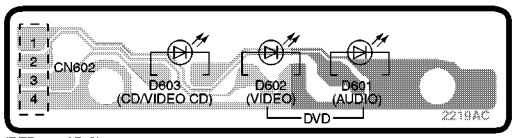
E OPERATION P.C.B.



C LOADING MOTOR P.C.B.



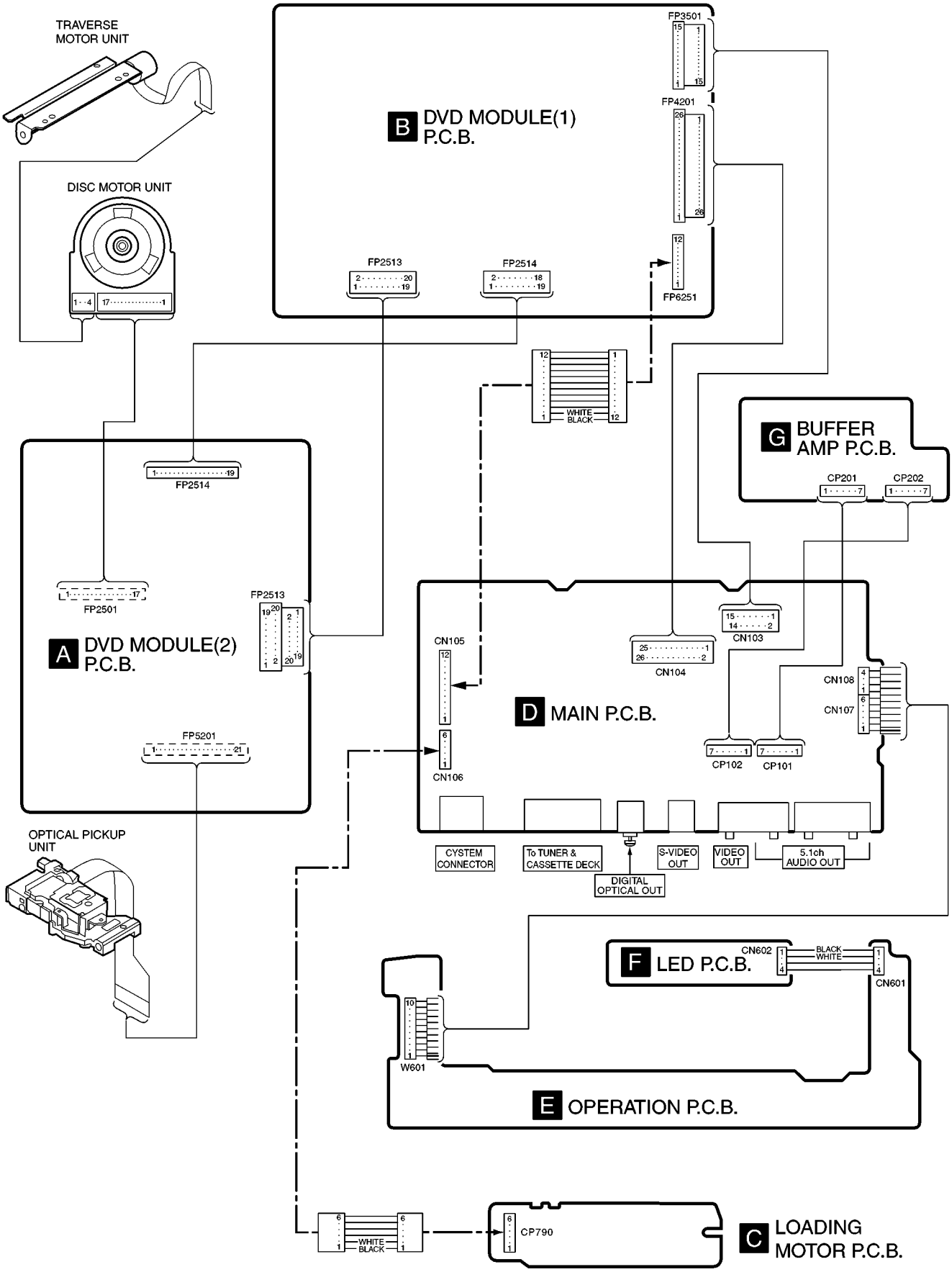
F LED P.C.B.



■ ELECTRICAL PARTS LOCATION

Ref. No.	Lo. No.	Ref. No.	Lo. No.	Ref. No.	Lo. No.
E OPERATION P.C.B.					
D604	8B	S615	3A	R611	7A
D605	2A	S617	2A	R612	7A
D606	5B	S618	2B	R613	7A
D607	4B	CN601	2C	R614	5A
S216	2A	W601	8B	R615	4A
S610	8A	R601	3A	R616	3A
S611	7A	R602	3B	R617	2A
S612	6A	R603	3B	R618	2C
S613	5B	R604	8A		
S614	4B	R605	2B		
C LOADING MOTOR P.C.B.					
IC790	3F	S791	3D	C790	3F
S790	3D	CP790	3D		
F LED P.C.B.					
D601	4F	D603	4E		
D602	4E	CN602	4D		

16 Wiring Connection Diagram



17 Terminal Function of IC´s

17.1. IC201 (M38504M6209F): SYSTEM CONTROL

Pin No.	Mark	I/O Division	Function
1	VCC	I	Connected to power supply
2	VREF		
3	AVSS	—	Connected to GND
4	MUTE	O	Mute control output terminal
5	PWCONT	O	DVD module power supply control output terminal
6	DACSEL	—	Not used, open
7	MIX/F	O	DOWN-MIX/FRONT 2ch select output terminal
8	B_REQ	I	Serial communication request signal input terminal
9	B_CS	O	Serial communication chip select signal output terminal
10	B_CLK	O	Serial communication clock signal output terminal
11	DATA O	O	Serial communication data signal output terminal
12	DATA I	I	Serial communication data signal input terminal
13	WIDE2	O	Select control output terminal for wide picture
14	WIDE1		
15	CNV_{SS}	—	Connected to GND
16	TEST	I	Test mode input terminal
17	E-CS	O	Serial signal output terminal for IC202
18	RESET	I	Reset signal input terminal
19	XIN	I	Crystal oscillator input terminal (f=8MHz)
20	XOUT	O	Crystal oscillator output terminal (f=8MHz)
21	V_{SS}	—	Connected to GND
22	LED-STB	O	Serial signal output to LED drive
23	LED/ E-CLK	O	Serial signal output terminal to LED drive or EEPROM
24	LED/ E-DATA	O	Serial signal output terminal to LED drive or EEPROM
25	LED-CLR	O	Latch clear signal output terminal to LED drive
26~28	NC	—	Not used, open
29	OPEN SW	I	Disc tray open switch det. input terminal
30	CLOSE SW	I	Disc tray close switch det. input terminal
31	NC	—	Not used, open
32	/OPEN	O	Motor drive control signal output terminal (to open direction)
33	/CLOSE	O	Motor drive control signal output terminal (to close direction)
34	OP_PW	O	Signal output terminal for SC-HDX3
35	DVD-CLK	I	Serial communication signal input terminal for DVD main micro-computer
36	DVD-CMD	O	Serial communication signal output terminal for DVD main micro-computer
37	DVD-STAT	I	Serial communication signal input for DVD main micro-computer
38	DV/HD	—	Connected to GND through resistor
39	NC	—	Not used, open
40	KEY2	I	Not used, connected to GND through resistor
41	KEY1		
42	REGION		

18 Replacement Parts List

Notes:

*Important safety notice:

Components identified by ⚠ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise(resistors), etc. are used.

When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.

*Warning: This product uses a laser diode. Refer to caution statements.

*ACHTUNG:Die lasereinheit nicht zerlegen. Die lasereinheit darf nur gegen einc vom hersteller spezifizierte einheit ausgetauscht werden.

*Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads(pF) F=Farads (F)

*Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000K (OHM)

*The markings (RTL) indicate that the Retention Time is limited for these items. After the discontinuation of these assemblies in production, the items will continue to be available for a specific period of time. The retention period of availabilityis dependant on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.

*The markings "*1" or "*2" in Remarks indicate the names of P.C.B.. ["*1": DVD module (1) P.C.B., "*2": DVD module (2) P.C.B.]

*[SPC] in Remarks columns parts that are supplied by S.P.C..

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	XTB3+8JFZ	SCREW	4	
2	REX1015Y	CONNECTOR ASS´Y(6P)	1	
3	REX1016S	CONNECTOR ASS´Y(12P)	1	
4	REZ1308	FFC(15P)	1	
5	REZ1309	FFC(26P)	1	
6	REZ1310	FFC(20P)	1	
7	REZ1311	FFC(19P)	1	
8	RKA0099-K	LEG CUSHION	2	
9	RKA0114-K	FOOT	2	
9-1	RKA0083-K	CUSHION	2	
10	XTB3+5JFZ	SCREW	2	
11	RHD26035	SCREW	2	
12	REX1017Y	CONNECTOR ASS´Y(4P)	1	
13	RGG0175C-N	FRONT PANEL	1	
14	RGL0481-Q	TIMER INDICATOR	1	
15	RGL0493-Q	LIGHT GUIDE	1	
16	RGP0776-N1	SUB PANEL	1	
17	RGU1843-N	BUTTON,SKIP	1	
18	RGU1859-N	BUTTON,PLAY/STOP/PAUSE	1	
19	XTBS26+8J	SCREW	10	
20	RYQ0311-N	TRAY ORNAMENT	1	
20-1	RGL0495-Q	TRAY INDICATOR	1	
20-2	VGB0527	DVD BADGE	1	
20-3	XQN26+AJ6FZ	SCREW	2	
21	XTB3+12J	SCREW	6	
22	XTB3+23J	SCREW	1	
23	XTBS3+8JFZ1	SCREW	11	
24	RHD30007-S	SCREW	4	
25	RKM0413-N	CABINET	1	
26	RMG0537-K	RUBBER	2	
27	RYQ0313A-K	REAR COVER	1	
101	RFKJXDT07-K	LOADING CHASSIS ASS´Y	1	
101-1	RDG0142	SLADING GEAR	1	
101-2	RDG0193	LOADING GEAR(1)	1	
101-3	RDP0065	PULLEY	1	
104	REM0019	LOADING MOTOR ASS´Y	1	
105	RME0063	LOCK LEVER SPRING	1	
106	RME0087A-1	SPRING	1	
107	RMG0158	BELT	1	
108	RML0178-1	LOCK LEVER	1	
109	RML0349	CONVERSHION LEVER	1	
110	RMM0059A-1	SLIDE PLATE 2	1	
111	RMM0079A-1	SLIDE PLATE 1	1	
112	XTN26+6G	SCREW	1	
113	XTV2+6G	SCREW	1	
114	XYN2+F6FZ	SCREW	2	
115	RXQ0382	DISC TRAY	1	
116	RHD20009-1	SCREW	1	
117	RHM245ZA	MAGNET	1	
118	RMA0793-1	DISC CLAMPER ASS´Y	1	
120	RMR1301-W	MAGNET HOLDER	1	
121	RMR1302-W	DISC HOLDER	1	
122	XTN26+6G	SCREW	2	
123	RFKNLPG440-K	DRIVE RUCK ASS´Y	1	
201	VED0402-1	OPTICAL PICKUP	1	[SPC]
202	VHD1358	SCREW	3	[SPC]
203	VMC1487	SUB-SHAFT TILT SPRING	1	[SPC]
204	VMC1607	SPRING HOLDER 2	1	[SPC]
205	VMD3260-2	NUT	1	[SPC]
207	VMC1490	SCREW NUT	1	[SPC]
208	VMC1491	SPRING PLATE	1	[SPC]
209	XQNQC17+3	SCREW	1	[SPC]
210	VHD1057	SCREW	1	[SPC]
211	VMC1606	SPRING HOLDER 1	1	[SPC]
212	VMB3278	SPRING	2	[SPC]
213	VEM0720	TRAVERSE MOTOR ASS´Y	1	[SPC]
214	VHD1224	SCREW	5	[SPC]
215	REE0991	FFC(17P)	1	
216	XXE26C6FN	SCREW	3	[SPC]
217	RHD20059	SCREW	4	
218	RMR1305-K	TRAVERSE CHASSIS	1	
219	VHD1223	SCREW	3	
220	VMT0994	RUBBER	2	
221	VMS6471	GUIDE SHAFT1	1	[SPC]
222	VMS6472	GUIDE SHAFT2	1	[SPC]
223	VMG1166	FLOATING RUBBER	3	[SPC]
C102	ECA1CAM471XB	16V 470U	1	
C103	ECUVNE104KBN	25V 0.1U	1	
C104	ECUVNC105ZFN	16V 1U	1	F1J1C105A063
C105	ECA0JAK221XB	6.3V 220U	1	
C106	ECUVNC105ZFN	16V 1U	1	F1J1C105A063
C107	ECA1EAM331XB	25V 330U	1	
C108	ECA1CAM221XB	16V 220U	1	
C109	ECUV1E223KBN	25V 0.022U	1	
C110	ECA1CAM221XB	16V 220U	1	
C111	ECUV1E223KBN	25V 0.022U	1	
C112	ECA1CAM221XB	16V 220U	1	
C113	ECUV1E223KBN	25V 0.022U	1	
C114	ECA0JAK221XB	6.3V 220U	1	
C115	ECA1CAM102XB	16V 1000U	1	ECA1CAK101XB
C116	ECUV1E223KBN	25V 0.022U	1	
C117,18	ECA0JAM102XB	6.3V 1000U	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C129	ECUVNE104KBN	25V 0.1U	1	
C131-34	ECUVNC224KBN	16V 0.22U	4	F1J1C224A091
C135,36	ECA1CAK470XB	16V 47U	2	
C137,38	ECUV1H102KBN	50V 1000P	2	
C139,40	ECUVNE104KBN	25V 0.1U	2	
C150	ECA1EAM102XB	25V 1000U	1	ECA1EAM101XB
C151	ECUVNE104KBN	25V 0.1U	1	
C152	ECA1EAM101XB	25V 100U	1	
C153	ECA0JAM102XB	6.3V 1000U	1	
C154	ECA1EAM101XB	25V 100U	1	
C155	ECA0JAM102XB	6.3V 1000U	1	
C156,57	ECA0JAM471XB	6.3V 470U	2	
C158	ECUVNC105ZFN	16V 1U	1	F1J1C105A063
C159	ECA0JAK221XB	6.3V 220U	1	
C160	ECUVNC105ZFN	16V 1U	1	F1J1C105A063
C161	ECA1CAM221XB	16V 220U	1	
C162	ECA0JAK221XB	6.3V 220U	1	
C163	ECUVNC105ZFN	16V 1U	1	F1J1C105A063
C181	ECEA1EKA220B	25V 22U	1	
C195,96	ECA1CAK470XB	16V 47U	2	
C199	ECA1EM472	25V 4700U	1	
C201	ECA0JAK470XH	6.3V 47U	1	
C202	RCE1HKA3R3BG	50V 3.3U	1	F2A1H3R3A015
C203,04	ECUVNE104KBN	25V 0.1U	2	
C205	ECA0JAK470XH	6.3V 47U	1	
C206	ECUVNE104KBN	25V 0.1U	1	
C207	ECUV1H101JCN	50V 100P	1	
C251	ECUV1H101JCN	50V 100P	1	
C294	ECUVNE104KBN	25V 0.1U	1	
C301,02	ECUVNE104KBN	25V 0.1U	2	
C303-05	ECUV1H101JCN	50V 100P	3	
C308	ECUVNC105ZFN	16V 1U	1	F1J1C105A063
C409	ECUV1H471JCN	50V 470P	1	F1J1H471A025
C411-16	ECUV1H102KBN	50V 1000P	6	
C421-26	ECA1HAK3R3XB	50V 3.3	6	ECA1CAK470XB
C451,52	ECA0JAM471XB	6.3V 470U	2	
C461-66	ECUV1H102KBN	50V 1000P	6	
C468-70	ECUV1H102KBN	50V 1000P	3	
C471-73	ECUV1H470JCN	50V 47P	3	
C474-77	ECUV1H102KBN	50V 1000P	4	
C491	ECUVNE104KBN	25V 0.1U	1	
C790	ECA1AKF820	10V 82U	1	
C2001	ECEV0JA101SP	6.3V 100U	1	
C2002	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2003	ECEV0JA101SP	6.3V 100U	1	
C2004	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2005	ECEV0JA101SP	6.3V 100U	1	
C2007	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C2008,09	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C2010	ECUV1H101KCV	50V 100P	1	
C2012	ECUV1H331KBV	50V 330P	1	
C2013-15	ECUV1H121JCV	50V 120P	3	
C2016,17	ECUV1H101KCV	50V 100P	2	
C2018,19	ECUV1H391KBV	50V 390P	2	
C2020	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2021,22	ECUVNC104KBV	16V 0.1U	2	
C2023	ECUV1H682KBV	50V 6800P	1	
C2024	ECUV1H681KBV	50V 680P	1	
C2025	ECUVNC104KBV	16V 0.1U	1	
C2026	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2027	ECUVNA105ZFV	10V 1U	1	F1H1A105A030
C2028	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2029	ECUV1H470KCV	50V 47P	1	
C2030	ECUVNE183KBV	25V 0.018U	1	
C2031	ECUV1H102KBV	50V 1000P	1	
C2032	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2033	ECUV0J474KBV	6.3V 0.47U	1	F1H0J474A002
C2034	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C2035	ERJ3GEY0R00V	CHIP JUMPER	1	
C2037	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2038	ECUVNC473KBV	16V 0.047U	1	F1H1C473A071
C2039	ECUV1C393KBV	16V 0.039U	1	
C2040	ECUV1H822KBV	50V 8200P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C2041	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2042	ECUVNC104KBV	16V 0.1U	1	
C2043	ECUVNC473KBV	16V 0.047U	1	F1H1C473A071
C2044	ECUVNC104KBV	16V 0.1U	1	
C2045-48	ECUZNC104ZFV	16V 0.1U	4	F1H1C1040008
C2051	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2060-63	ECUZNC104ZFV	16V 0.1U	4	F1H1C1040008
C2064	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008 (*1)
C2064	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008 (*2)
C2071-75	ECUV1H270JCV	50V 27P	5	
C2076	ECUV1H100JCV	50V 10P	1	F1H1H100A244
C2077-80	ECUV1H270JCV	50V 27P	4	
C2098,99	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C2500	EEVFC1C101P	16V 100U	1	
C2501	ECEV0JA101SP	6.3V 100U	1	
C2502	EEVFC0J221P	6.3V 220U	1	
C2503-05	ECUVNH103KBV	50V 0.01U	3	F1H1H103A748
C2506	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C2507	ECUVNC104KBV	16V 0.1U	1	
C2508,09	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C2513,14	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C2515	ECUVNC104KBV	16V 0.1U	1	
C2516	ECEV0JA470SR	6.3V 47U	1	
C2525	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C3001,02	EEVHB0J101P	6.3V 100U	2	
C3004	ECUVNA105KBN	10V 1U	1	F1J1A105A003
C3005,06	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C3007,08	ECUVNA105KBN	10V 1U	2	F1J1A105A003
C3009-11	ECUZNC104ZFV	16V 0.1U	3	F1H1C1040008
C3012,13	ECUVNA105KBN	10V 1U	2	F1J1A105A003
C3014,15	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C3016	ECUVNA105KBN	10V 1U	1	F1J1A105A003
C3017-20	ECUZNC104ZFV	16V 0.1U	4	F1H1C1040008
C3021,22	ECUVNA105KBN	10V 1U	2	F1J1A105A003
C3023,24	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C3025,26	ECUVNA105KBN	10V 1U	2	F1J1A105A003
C3027-35	ECUZNC104ZFV	16V 0.1U	9	F1H1C1040008
C3043,44	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C3046	ECUV1H220JCV	50V 22P	1	
C3052-55	ECUVNA105KBN	10V 1U	4	F1J1A105A003
C3058,59	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C3061-64	ECUZNC104ZFV	16V 0.1U	4	F1H1C1040008
C3065	ECST1AY106RR	10V 10U	1	ECST1AY106R
C3066	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C3071-74	ECUZNC104ZFV	16V 0.1U	4	F1H1C1040008
C3075	ECST1AY106RR	10V 10U	1	ECST1AY106R
C3076	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C3091	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C3098,99	ECUV1H102KBV	50V 1000P	2	
C3201	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C3211	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C3251-58	ECUZNC104ZFV	16V 0.1U	8	F1H1C1040008
C3259	ECUVNA105KBN	10V 1U	1	F1J1A105A003
C3260,61	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C3271,72	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C3281	EEVHB0J101P	6.3V 100U	1	
C3282	ECUVNA105KBN	10V 1U	1	F1J1A105A003
C3286	EEVHB0J101P	6.3V 100U	1	
C3501	ECEV0JA470SR	6.3V 47U	1	
C3502,03	ECUVNH103KBV	50V 0.01U	2	F1H1H103A748
C3504	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C3505	ECEV0JA101SP	6.3V 100U	1	
C3511-14	ECUVNH103KBV	50V 0.01U	4	F1H1H103A748
C3524-26	ECUVNH103KBV	50V 0.01U	3	F1H1H103A748
C4006	RCST1CY106RG	16V 10U	1	F3F1C1060002
C4010	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C4011,12	RCST1CY106RG	16V 10U	2	F3F1C1060002
C4014	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C4040	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C4041,42	RCST1CY106RG	16V 10U	2	F3F1C1060002
C4043	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C4044	ECEV0JA470SR	6.3V 47U	1	
C4045-48	ECUZNC104ZFV	16V 0.1U	4	F1H1C1040008
C4109	RCST1CC476RC	16V 47U	1	F3H1A476A001
C4119	ECUV1H470JCV	50V 47P	1	
C4131	ECUV1H101JCV	50V 100P	1	F1H1H101A004
C4143	ECUV1H102KBV	50V 1000P	1	
C4180	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C4209	RCST1CC476RC	16V 47U	1	F3H1A476A001
C4219	ECUV1H470JCV	50V 47P	1	
C4231	ECUV1H101JCV	50V 100P	1	F1H1H101A004
C4243	ECUV1H102KBV	50V 1000P	1	
C4278	RCST1CY106RG	16V 10U	1	F3F1C1060002
C4279-81	ECUZNC104ZFV	16V 0.1U	3	F1H1C1040008
C4283	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C4284	RCST1CY106RG	16V 10U	1	F3F1C1060002
C4285	ECEV0JA470SR	6.3V 47U	1	
C4295	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C4300	RCST1CC476RC	16V 47U	1	F3H1A476A001
C4303	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C4305	RCST1CC476RC	16V 47U	1	F3H1A476A001
C4309,10	RCST1CC476RC	16V 47U	2	F3H1A476A001
C4319,20	ECUV1H220JCV	50V 22P	2	
C4321,22	ECUV1H470JCV	50V 47P	2	
C4324	ECUV1H821KBV	50V 820P	1	
C4327,28	ECUV1H102KBV	50V 1000P	2	
C4331-34	ECUV1H101JCV	50V 100P	4	F1H1H101A004
C4343	ECUV1H821KBV	50V 820P	1	
C4353,54	RCST1CC476RC	16V 47U	2	F3H1A476A001
C4356	ECUV1H102KBV	50V 1000P	1	
C4357	ECUV1H470JCV	50V 47P	1	
C4358	ECUV1H101JCV	50V 100P	1	F1H1H101A004
C4359	ECUV1H102KBV	50V 1000P	1	
C4361	ECUV1H102KBV	50V 1000P	1	
C4362	ECUV1H101JCV	50V 100P	1	F1H1H101A004
C4363	ECUV1H470JCV	50V 47P	1	
C4380-85	ECUZNC104ZFV	16V 0.1U	6	F1H1C1040008
C4901,02	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C4905,06	ECEV0JA101SP	6.3V 100U	2	
C5201	ECEV0JA330SR	6.3V 33	1	
C5202,03	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C5204	ECEV0JA330SR	6.3V 33	1	
C5205	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C5206	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C5211	ECEV0JA470SR	6.3V 47U	1	
C5212	ECUV1H221KBV	50V 220P	1	F1H1H2210001
C5213	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C5214	ECUVNC104KBV	16V 0.1U	1	
C5215	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C5216	ECUV1H102KBV	50V 1000P	1	
C5217	ECUVNC104KBV	16V 0.1U	1	
C5218	ECUV1H180JCV	50V 18P	1	
C5219	ECUV1H182KBV	50V 1800P	1	
C5220	ECUV1H101KCV	50V 100P	1	
C5221	ECUV1H390KCV	50V 39P	1	
C5222,23	ECUV0J474KBV	6.3V 0.47U	2	F1H0J474A002
C5224,25	ECUV1H221KBV	50V 220P	2	F1H1H2210001
C5226	ECUVNC104KBV	16V 0.1U	1	
C5227	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C5232	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C5233	ECST1AY106RR	10V 10U	1	ECST1AY106R
C5234	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C6011	ECUVNH103KBV	50V 0.01U	1	F1H1H103A748
C6012-14	ECEV0JA101SP	6.3V 100U	3	
C6015	ECEV0JA470SR	6.3V 47U	1	
C6016	ECEV0JA101SP	6.3V 100U	1	
C6091	ECUV1H102KBV	50V 1000P	1	
C6201	ECEV0JA101SP	6.3V 100U	1	
C6202-07	ECUZNC104ZFV	16V 0.1U	6	F1H1C1040008
C6301	ECUV1H101JCV	50V 100P	1	F1H1H101A004
C6302,03	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C6305	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C6501	ECEV0JA470SR	6.3V 47U	1	
C6502,03	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C6504	ECST1AY106RR	10V 10U	1	ECST1AY106R
C6505	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C6511-13	ECUZNC104ZFV	16V 0.1U	3	F1H1C1040008
C6514,15	ECUV1H150JCV	50V 15P	2	
C6516,17	ECUZNC104ZFV	16V 0.1U	2	F1H1C1040008
C6551	EEVHB0J101P	6.3V 100U	1	
C6552	ECUVNA105KBN	10V 1U	1	F1J1A105A003
C6553	EEVHB0J101P	6.3V 100U	1	
C6599	ECUV1H102KBV	50V 1000P	1	
C7001,02	ECEV0JA101SP	6.3V 100U	2	
C7006	ECUZNC104ZFV	16V 0.1U	1	F1H1C1040008
C7011-26	ECUZNC104ZFV	16V 0.1U	16	F1H1C1040008
C8001	ECEV0JA101SP	6.3V 100U	1	
C8002-07	ECUVNC224ZFV	16V 0.22U	6	
CN103	RJS2A5615	CONNECTOR(15P)	1	K1MN15A00018
CN104	RJS2A5626	CONNECTOR(26P)	1	K1MN26A00022
CN105	RJP12G18ZA	CONNECTOR(12P)	1	K1KA12A00176
CN106	RJP6G18ZA	CONNECTOR(6P)	1	K1KA06A00220
CN107	RJS1A6606T1	CONNECTOR(6P)	1	K1MP06A00009
CN108	RJS1A6604T1	CONNECTOR(4P)	1	K1MP04A00008
CP101,02	RJT100W07	CONNECTOR(7P)	2	K1KA07A00082
CP201,02	RJT100W07	CONNECTOR(7P)	2	K1KA07A00082
CP790	RJP6G17ZA	CONNECTOR(6P)	1	K1KA06B00117
D101-03	RL1N4003N02	DIODE	3	
D111	MA8110MTX	DIODE	1	⚠
D112	MA111TX	DIODE	1	MA2J11100L
D131	MA152WATX	DIODE	1	MA3X152D0L
D151,52	SFPB-64	DIODE	2	B0JCME000027
D191	MA2H73500L	DIODE	1	
D201-04	MA111TX	DIODE	4	MA2J11100L
D205	MA728TX	DIODE	1	MA2J72800L
D251-56	MA111TX	DIODE	6	MA2J11100L
D291	MA111TX	DIODE	1	MA2J11100L
D411	MA152WATX	DIODE	1	MA3X152D0L
D413	MA152WATX	DIODE	1	MA3X152D0L
D415	MA152WATX	DIODE	1	MA3X152D0L
D601-04	SLR325YCT31	LED	4	
D605	SML79420C	LED	1	
D606,07	LNH0A8CYB0A1	LED	2	
D3099	MA111TX	DIODE	1	MA2J11100L
D5231	ERJ3GEY0R00V	CHIP JUMPER	1	
D6311	MA728TX	DIODE	1	MA2J72800L
FL2021-24	ELKE103FA	CHIP L	4	
FL6011-16	ELKE103FA	CHIP L	6	
FP2501	RJS2A5017T	CONNECTOR(17P)	1	K1MN17B00029
FP2513	K1MN20A00045	CONNECTOR(20P)	1	(*1)
FP2513	RJS2A7520T	CONNECTOR(20P)	1	K1MN20B00046 (*2)
FP2514	K1MN20A00045	CONNECTOR(19P)	1	(*1)
FP2514	RJS2A0619T	CONNECTOR(19P)	1	K1MN19B00017 (*2)
FP3501	RJS2A7515T	CONNECTOR(15P)	1	K1MN15B00037
FP4201	RJS2A7526T	CONNECTOR(26P)	1	K1MN26B00037
FP5201	RJS2A0621T	CONNECTOR(21P)	1	K1MN21B00022
IC101	UPC29M05T	IC	1	⚠
IC103	NJM4580MTE1	IC	1	C0ABBB000127
IC131,32	NJM4580MTE1	IC	2	C0ABBB000127
IC151,52	PQ1CZ21H2ZP	IC	2	C0DBCMG00001 ⚠
IC153	PQ025EZ01ZP	IC	1	⚠
IC154	PQ09RF1	IC	1	C0DAZHG00016 ⚠
IC155	PQ05DZ1U	IC	1	C0DBZHG00005 ⚠
IC201	C2BBFD000226	IC	1	
IC301	NJU3713GTE1	IC	1	C0ZBZ0000040
IC491	T0TX178	IC	1	B3RAE0000004
IC790	TA7291S	IC	1	C0GAL0000001
IC2001	MN67706EA	IC	1	
IC2002	TC7WU04FUT2L	IC	1	
IC2501	AN8480NSB-E1	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC2511	BA5983FM-E2	IC	1	
IC3001	MN677521HB	IC	1	
IC3061	TVSA0435	IC	1	C3ABMG000040
IC3071	TVSA0435	IC	1	C3ABMG000040
IC3091	TC7WH157FUTL	IC	1	C0JBAR000191
IC3201	ADV7172	IC	1	
IC3281	TK71533SCL	IC	1	C0CBABB00043 ⚠
IC3501	BA7665FS-E2	IC	1	
IC4001	PCM1604YT2	IC	1	
IC4008	PCM1746ET2	IC	1	
IC4112	NJM4580MTE1	IC	1	C0ABBB000127
IC4212	NJM4580MTE1	IC	1	C0ABBB000127
IC4251	TC74HCT7007A	IC	1	C0JBAZ001229
IC4312	NJM4580MTE1	IC	1	C0ABBB000127
IC4314	NJM4580MTE1	IC	1	C0ABBB000127
IC4316-19	NJM4580MTE1	IC	4	C0ABBB000127
IC5201	AN8707FH	IC	1	
IC6201	MN102H55GFB	IC	1	
IC6301	PST596JNR	IC	1	C0EBE0000070
IC6302	VUB8011W157	IC	1	
IC6303	AT25040NSI27	IC	1	C3EBEA000001
IC6501	BU2285FV-E2	IC	1	
IC6551	TK71533SCL	IC	1	C0CBABB00043 ⚠
IC7001	MN103S13BGA	IC	1	
IC8001	MN5C027D4H1	IC	1	
JK101	SJF3069-20N	JACK,SPEAKER/VIDEO OUT	1	
JK102	K2HA306B0031	JACK,SPEAKER	1	
JK103	VJJ0544	JACK,S VIDEO OUT	1	K1CB104B0017
JK104	RJT065K19	SYSTEM CONNECTOR(19P)	1	K1FA219B0001
JK105	SJS604	SYSTEM CONNECTOR(6P)	1	
L151,52	ELC12E221	COIL	2	
L153,54	ELELN100KA	COIL	2	
L201	RLQP1R0KT1-Y	COIL	1	G1C1R0K00007
L401	G0BYYYY00016	COIL,CHOKE	1	
L403	G0BYYYY00016	COIL,CHOKE	1	
L2001-03	RLQU100KT-W	COIL	3	G1C100K00004
L2501	ERJ14Y0R00H	CHIP JUMPER	1	
L3281	VLQ0779K100	COIL	1	G1C100KA0005
L3501	VLQ0779K100	COIL	1	G1C100KA0005
L5201,02	RLQU100KT-W	COIL	2	G1C100K00004
L6201	ELJEA100KF	COIL	1	
L6502	ELJFC220KF	COIL	1	
L6504	VLP0323A601R	COIL	1	J0JCC0000101
L6551	VLQ0779K100	COIL	1	G1C100KA0005
L7001,02	ELJEA100KF	COIL	2	
LB461-66	RLBN102V-Y	COIL	6	J0JBC0000041
LB467	RLBN601V-W	COIL	1	J0JCC0000008
LB468-70	RLBN102V-Y	COIL	3	J0JBC0000041
LB471	VLP0145-T	COIL	1	J0JCC0000120
LB2001-05	VLP0323A601R	COIL	5	J0JCC0000101
LB2006-16	VLP0323A601R	COIL	11	J0JCC0000101 (*1)
LB2006-16	VLP0323A601R	COIL	11	J0JCC0000101 (*2)
LB2017	ERJ3GEYJ221V	1/16W 220	1	
LB2018-21	VLP0155-T	COIL	4	J0JCC0000119 (*1)
LB2018-21	ERJ3GEYJ221V	1/16W 220	4	(*2)
LB2022-28	VLP0323A601R	COIL	7	J0JCC0000101 (*1)
LB2022-28	VLP0323A601R	COIL	7	J0JCC0000101 (*2)
LB2029-34	VLP0155-T	COIL	6	J0JCC0000119
LB2035	VLP0157-T	COIL	1	
LB2122-24	VLP0323A601R	COIL	3	J0JCC0000101
LB2501-08	VLP0323A601R	COIL	8	J0JCC0000101
LB2509-11	JALBK2HS470T	COIL	3	G1CYYYZ00003
LB2512	VLP0323A601R	COIL	1	J0JCC0000101

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
LB2513-16	JALBK2HS470T	COIL	4	G1CYYYZ00003
LB3001	RLBV241CV-Y	CHIPINDUCTOR	1	J0JCC0000121
LB3099	RLBV241CV-Y	CHIPINDUCTOR	1	J0JCC0000121
LB3501-03	VLP0323A601R	COIL	3	J0JCC0000101
LB3504	ERJ3GEYJ101V	1/16W 100	1	
LB3505-07	ERJ3GEYJ271V	1/16W 270	3	
LB4013-20	VLP0323A601R	COIL	8	J0JCC0000101
LB5201,02	VLP0323A601R	COIL	2	J0JCC0000101
LB5203	JALBK2HS470T	COIL	1	G1CYYYZ00003
LB5204-10	VLP0323A601R	COIL	7	J0JCC0000101
LB5211	JALBK2HS470T	COIL	1	G1CYYYZ00003
LB5212-14	VLP0323A601R	COIL	3	J0JCC0000101
LB5215	JALBK2HS470T	COIL	1	G1CYYYZ00003
LB5216	VLP0323A601R	COIL	1	J0JCC0000101
LB5217	JALBK2HS470T	COIL	1	G1CYYYZ00003
LB5218	VLP0323A601R	COIL	1	J0JCC0000101
LB6201	VLP0323A601R	COIL	1	J0JCC0000101
LB6501	ERJ3GEY0R00V	CHIP JUMPER	1	
LB6502	VLP0323A601R	COIL	1	J0JCC0000101
LB6503	RLBV241CV-Y	CHIPINDUCTOR	1	J0JCC0000121
LB6504	ERJ3GEY0R00V	CHIP JUMPER	1	
LB6505	RLBV241CV-Y	CHIPINDUCTOR	1	J0JCC0000121
LB6506	ERJ3GEY0R00V	CHIP JUMPER	1	
LB6507	RLBV241CV-Y	CHIPINDUCTOR	1	J0JCC0000121
LB6521	ERJ3GEYJ221V	1/16W 220	1	
LB6531	RLBV241CV-Y	CHIPINDUCTOR	1	J0JCC0000121
LB6598,99	RLBV241CV-Y	CHIPINDUCTOR	2	J0JCC0000121
P6251	RJS2A8212T	CONNECTOR(12P)	1	K1KA12B00066
PCB1	REP1960A	LOADING MOTOR P.C.B.	1	(RTL)
PCB2	REP2981A-1N	DVD MODULE(2) P.C.B.	1	(RTL)
PCB3	REP2990BA-S	MAIN P.C.B.	1	(RTL)
PCB4	REP2989AB-N	DVD MODULE(1)P.C.B.	1	(RTL)
PCB5	REP2990AB-S	OPERATION P.C.B.	1	(RTL)
PS6201	VJS2961C010	TEST TERMINAL	1	K1KB10A00075
Q101	2SK170VTP2	TRANSISTOR	1	
Q102	2SD1862QRTV2	TRANSISTOR	1	B1BACD000011 ⚠ ;
Q131,32	2SD1328QRSTX	TRANSISTOR	2	2SD13280WL
Q201	DTC114YUA106	TRANSISTOR	1	B1GBCFJN0009
Q202	DTC143EUA106	TRANSISTOR	1	B1GBCFGG0011
Q203,04	2SC4081STX	TRANSISTOR	2	B1ABCF000021
Q206-09	DTC114EUA106	TRANSISTOR	4	B1GBCFJJ0007
Q251,52	DTC114EUA106	TRANSISTOR	2	B1GBCFJJ0007
Q291	DTC114EUA106	TRANSISTOR	1	B1GBCFJJ0007
Q301	DTC114EUA106	TRANSISTOR	1	B1GBCFJJ0007
Q302	DTA114EUA106	TRANSISTOR	1	B1GDCFJJ0008
Q411-16	2SD1328QRSTX	TRANSISTOR	6	2SD13280WL
Q441	2SB1218ARTX	TRANSISTOR	1	2SB1218ARL
Q456,57	DTC114EUA106	TRANSISTOR	2	B1GBCFJJ0007
Q3201	2SB1218ARTX	TRANSISTOR	1	2SB1218ARL
Q3211	2SB1218ARTX	TRANSISTOR	1	2SB1218ARL
Q3511	2SB1218ARTX	TRANSISTOR	1	2SB1218ARL
Q3512	2SD1819ASTX	TRANSISTOR	1	2SD1819ASL
Q3513	2SB1218ARTX	TRANSISTOR	1	2SB1218ARL
Q3521	2SB1218ARTX	TRANSISTOR	1	2SB1218ARL
Q3522	2SD1819ASTX	TRANSISTOR	1	2SD1819ASL
Q3523	2SB1218ARTX	TRANSISTOR	1	2SB1218ARL
Q4202	UN5114TX	TRANSISTOR	1	UNR511400L
Q4303	DTC114EUA106	TRANSISTOR	1	B1GBCFJJ0007
Q4317	2SJ145CTA	TRANSISTOR	1	
Q5201	2SB1115-T1	TRANSISTOR	1	
Q6311	UN5212TX	TRANSISTOR	1	UNR521200L
QR2001	UN5213TX	TRANSISTOR	1	UNR521300L
QR5201	UN5212TX	TRANSISTOR	1	UNR521200L
QR5231	UN2121-TX	TRANSISTOR	1	UNR212100L
R101,02	ERQ16NKWR10E	1/6W 0.1	2	⚠
R103	ERJ6GEYJ102V	1/10W 1K	1	
R104	ERJ6GEYJ331V	1/10W 330	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R105,06	ERJ6GEYJ104V	1/10W 100K	2	
R111	ERJ6GEYJ105	1/10W 1M	1	
R129	ERJ6GEYJ103V	1/10W 10K	1	
R131-40	ERJ6GEYJ103V	1/10W 10K	10	
R141,42	ERJ6GEYJ393V	1/10W 39K	2	
R143,44	JAR1220P821D	820	2	
R145,46	ERJ6GEYJ821V	1/10W 820	2	
R147,48	JAR1220P473D	47K	2	D0HD473ZA002
R149,50	JAR1220P221D	220	2	
R151	ERJ6GEYD152V	1/10W 1.5K	1	
R152	ERJ6GEYD911V	910	1	
R153	ERJ6GEYD302V	3K	1	
R154	ERJ6GEYD102V	1/10W 1K	1	
R155	ERJ6GEYJ100	10	1	ERJ6GEYJ100V
R191	ERJ6GEYJ1R0V	1/10W 1	1	
R192	ERQ16NKWR68E	0.68	1	⚠
R197,98	JAR1220P473D	47K	2	D0HD473ZA002
R201	ERJ6GEYJ681V	1/10W 680	1	
R202	ERJ6GEYJ104V	1/10W 100K	1	
R203	ERJ6GEYJ103V	1/10W 10K	1	
R204	ERJ6GEYJ102V	1/10W 1K	1	
R205-09	ERJ6GEYJ103V	1/10W 10K	5	
R210	ERJ6GEYJ223V	1/10W 22K	1	
R211	ERJ6GEYJ101V	1/10W 100	1	
R212	ERJ6GEYJ102V	1/10W 1K	1	
R213,14	ERJ6GEYJ472V	1/10W 4.7K	2	
R215	ERJ6GEYJ102V	1/10W 1K	1	
R216-18	ERJ6GEYJ221V	1/10W 220	3	
R219	ERJ6GEYJ821V	1/10W 820	1	
R220-23	ERJ6GEYJ103V	1/10W 10K	4	
R224,25	ERJ6GEYJ102V	1/10W 1K	2	
R226,27	ERJ6GEYJ223V	1/10W 22K	2	
R228	ERJ6GEYJ102V	1/10W 1K	1	
R229	ERJ6GEYJ104V	1/10W 100K	1	
R230	ERJ6GEYJ472V	1/10W 4.7K	1	
R238	ERJ6GEYJ103V	1/10W 10K	1	
R239	ERJ6GEYJ182V	1/10W 1.8K	1	
R242	ERJ6GEYJ103V	1/10W 10K	1	
R243	ERJ6GEYJ182V	1/10W 1.8K	1	
R253,54	ERJ6GEYJ102V	1/10W 1K	2	
R297	ERJ6GEYJ472V	1/10W 4.7K	1	
R298	ERJ6GEYJ272V	1/10W 2.7K	1	
R299	ERJ6GEYJ103V	1/10W 10K	1	
R301	ERJ6GEYJ103V	1/10W 10K	1	
R303-05	ERJ6GEYJ101V	1/10W 100	3	
R411	ERJ6GEYJ152V	1/10W 1.5K	1	
R412	ERJ6GEYJ821V	1/10W 820	1	
R413	JAR1220P473D	47K	1	D0HD473ZA002
R414	JAR1220P221D	220	1	
R415	ERJ6GEYJ152V	1/10W 1.5K	1	
R416	ERJ6GEYJ821V	1/10W 820	1	
R417	JAR1220P473D	47K	1	D0HD473ZA002
R418	JAR1220P221D	220	1	
R422	ERJ6GEYJ181V	1/19W 180	1	
R423	ERJ6GEYJ152V	1/10W 1.5K	1	
R424	ERJ6GEYJ821V	1/10W 820	1	
R425	JAR1220P473D	47K	1	D0HD473ZA002
R426	JAR1220P221D	220	1	
R427	ERJ6GEYJ152V	1/10W 1.5K	1	
R428	ERJ6GEYJ821V	1/10W 820	1	
R429	JAR1220P473D	47K	1	D0HD473ZA002
R430	JAR1220P221D	220	1	
R431	ERJ6GEYJ152V	1/10W 1.5K	1	
R432	ERJ6GEYJ821V	1/10W 820	1	
R433	JAR1220P473D	47K	1	D0HD473ZA002
R434	JAR1220P221D	220	1	
R435	ERJ6GEYJ152V	1/10W 1.5K	1	
R436	ERJ6GEYJ821V	1/10W 820	1	
R437	JAR1220P473D	47K	1	D0HD473ZA002
R438	JAR1220P221D	220	1	
R441	ERJ6GEYJ103V	1/10W 10K	1	
R451-53	ERJ6GEYD750V	1/10W 75	3	
R454,55	ERJ6GEYJ223V	1/10W 22K	2	

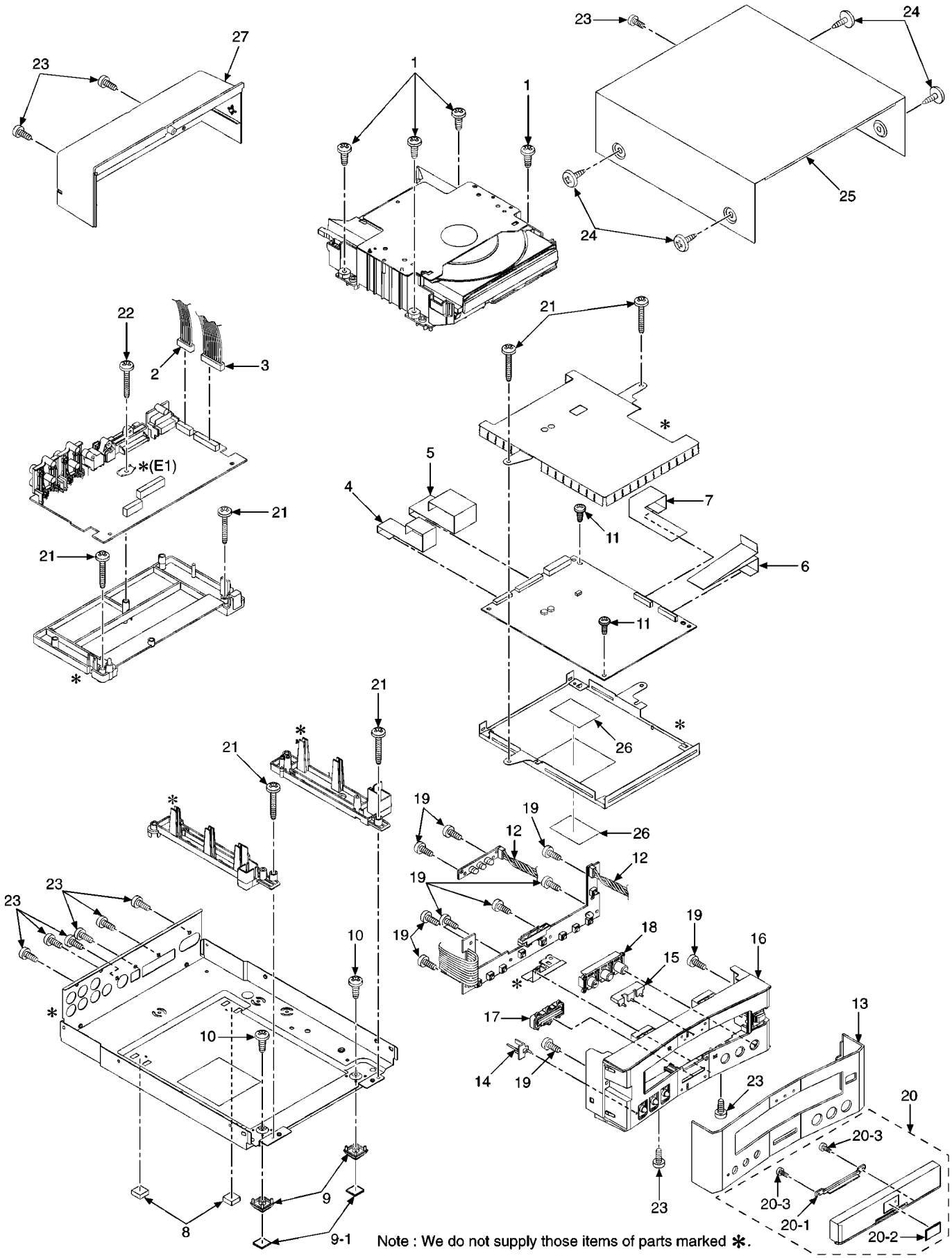
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R456,57	ERJ6GEYJ472V	1/10W 4.7K	2	
R491	ERJ6GEYJ103V	1/10W 10K	1	
R492	ERJ6GEYJ102V	1/10W 1K	1	
R493	ERJ6GEYJ103V	1/10W 10K	1	
R601-04	ERJ6GEYJ221V	1/10W 220	4	
R605	ERJ6GEYJ151V	1/10W 150	1	
R611	ERJ6GEYJ682V	1/10W 6.8K	1	
R612	ERJ6GEYJ472V	1/10W 4.7K	1	
R613	ERJ6GEYJ332V	1/10W 3.3K	1	
R614	ERJ6GEYJ222V	1/10W 2.2K	1	
R615	ERJ6GEYJ182V	1/10W 1.8K	1	
R616	ERJ6GEYJ152V	1/10W 1.5K	1	
R617	ERJ6GEYJ122V	1/10W 1.2K	1	
R618	ERJ6GEYJ102V	1/10W 1K	1	
R2001-07	ERJ3GEYJ473V	1/16W 47K	7	D0GB473JA002
R2008,09	ERJ3GEYJ223V	1/16W 22K	2	D0GB223JA002
R2010	ERJ3GEYJ273V	1/16W 27K	1	D0GB273JA002
R2011	ERJ3GEYJ123V	1/16W 12K	1	
R2012	ERJ3GEYD562V	1/16W 5.6K	1	
R2013	ERJ3GEYJ273V	1/16W 27K	1	D0GB273JA002
R2014	ERJ3GEYJ105V	1/16W 1M	1	
R2017	ERJ3GEYD153V	1/16W 15K	1	D0HB153ZA002
R2018	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R2020	ERJ3GEYD123V	1/16W 12K	1	D0HB123ZA002
R2021	ERJ3GEYJ103Z	1/16W 10K	1	
R2022,23	ERJ3GEYJ223V	1/16W 22K	2	D0GB223JA002
R2024,25	ERJ3GEYJ563V	1/16W 56K	2	
R2026	ERJ3GEYJ105V	1/16W 1M	1	
R2027	ERJ3GEYJ472V	1/16W 4.7K	1	D0GB472JA002
R2028	ERJ3GEYJ103Z	1/16W 10K	1	
R2029	ERJ3GEYJ471V	1/10W 470	1	(*1)
R2029	ERJ3GEYD103V	1/16W 10K	1	D0HB103ZA002 (*2)
R2030	ERJ3GEYJ103Z	1/16W 10K	1	
R2031	MCR03PZHJ561	1/16W 560	1	
R2032	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R2033,34	ERJ3GEYJ472V	1/16W 4.7K	2	D0GB472JA002
R2051	ERJ3GEY0R00V	1/16W 0	1	
R2067-71	ERJ3GEYJ221V	1/16W 220	5	
R2072	ERJ3GEY0R00V	1/16W 0	1	
R2073-77	VLP0323A601R	COIL	5	J0JCC0000101
R2501,02	ERJ3GEYJ271V	1/16W 270	2	
R2503	ERJ14YKR39H	1/4W 0.39	1	
R2505	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R2511	ERJ3GEYD203V	1/16W 20K	1	D0HB203ZA002
R2512	ERJ3GEYJ273V	1/16W 27K	1	D0GB273JA002
R2513	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R2514	ERJ3GEYD203V	1/16W 20K	1	D0HB203ZA002
R2515	ERJ3GEYJ273V	1/16W 27K	1	D0GB273JA002
R2516	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R2517	ERJ3GEYJ123V	1/16W 12K	1	
R2518	ERJ3GEYJ103Z	1/16W 10K	1	
R2519	ERJ3GEYD752V	1/16W 7.5K	1	D0HB752ZA002
R2520	ERJ3GEYJ123V	1/16W 12K	1	
R2521	ERJ3GEYJ103Z	1/16W 10K	1	
R2522	ERJ3GEYD752V	1/16W 7.5K	1	D0HB752ZA002
R2527,28	ERJ3GEYJ103Z	1/16W 10K	2	
R3002	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R3003	ERJ3GEYJ103Z	1/16W 10K	1	
R3019	ERJ3GEYJ220V	1/16W 22	1	
R3022	ERJ3GEYJ101V	1/16W 100	1	
R3050	ERJ3GEYJ101V	1/16W 100	1	
R3051	ERJ3GEYJ684V	1/16W 680K	1	
R3052,53	ERJ3GEYJ102V	1/16W 1K	2	
R3054	ERJ3GEYJ101V	1/16W 100	1	
R3055	ERJ3GEYJ684V	1/16W 680K	1	
R3057	ERJ3GEYJ101V	1/16W 100	1	
R3058	ERJ3GEYJ684V	1/16W 680K	1	
R3059	ERJ3GEYJ102V	1/16W 1K	1	
R3060	ERJ3GEYJ101V	1/16W 100	1	
R3061	ERJ3GEYJ684V	1/16W 680K	1	
R3062	ERJ3GEYJ102V	1/16W 1K	1	
R3071	ERJ3GEYJ103Z	1/16W 10K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R3096	ERJ3GEYJ682V	1/16W 6.8K	1	D0GB682JA002
R3097	ERJ3GEYJ122V	1/16W 1.2K	1	
R3098	ERJ3GEYJ181V	1/16W 180	1	
R3099	ERJ3GEYJ221V	1/16W 220	1	
R3201	ERJ3GEYJ221V	1/16W 220	1	
R3202	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3203	ERJ3GEYJ102V	1/16W 1K	1	
R3211	ERJ3GEYJ221V	1/16W 220	1	
R3212	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3213	ERJ3GEYJ102V	1/16W 1K	1	
R3221	ERJ3GEYJ221V	1/16W 220	1	
R3232	ERJ3GEYJ221V	1/16W 220	1	
R3241	ERJ3GEYJ221V	1/16W 220	1	
R3251,52	ERJ3GEYJ101V	1/16W 100	2	
R3253	ERJ3GEYJ821V	1/16W 820	1	
R3254	ERJ3GEYJ221V	1/16W 220	1	
R3255,56	ERJ3GEYD102V	1/16W 1K	2	
R3257	ERJ3GEYJ821V	1/16W 820	1	
R3259	ERJ3GEY0R00V	1/16W 0	1	
R3501,02	MCR03PZHJ561	1/16W 560	2	
R3503	ERJ3GEYJ103Z	1/16W 10K	1	
R3504	ERJ3GEYJ333V	1/16W 33K	1	D0GB333JA002
R3514,15	ERJ3GEYJ333V	1/16W 33K	2	D0GB333JA002
R3516	ERJ3GEYJ222V	1/16W 2.2K	1	
R3517	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3518	ERJ3GEYJ102V	1/16W 1K	1	ERJ3GEYJ331V
R3519	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3520	ERJ3GEYJ222V	1/16W 2.2K	1	
R3525	ERJ3GEYJ101V	1/16W 100	1	
R3526	ERJ3GEYJ222V	1/16W 2.2K	1	
R3527	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3528	ERJ3GEYJ182V	1/16W 1.8K	1	
R3529	ERJ3GEYJ330V	1/16W 33	1	D0GB330JA002
R3530	ERJ3GEYJ222V	1/16W 2.2K	1	
R3601	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R3923,24	ERJ3GEY0R00V	1/16W 0	2	
R4001	ERJ3GEY0R00V	1/16W 0	1	
R4004-07	ERJ3GEYJ471V	1/16W 470	4	
R4009	ERJ3GEYJ471V	1/16W 470	1	
R4113	JAR0816P104D	100K	1	D0HB104ZA004
R4141	JAR0816P153D	15K	1	D0HB153ZA002
R4153	JAR0816P223D	22K	1	D0HB223ZA002
R4157	JAR0816P682D	6.8K	1	D0HB682ZA002
R4165	JAR0816P103D	10K	1	D0HB103ZA002
R4173	JAR0816P682D	6.8K	1	D0HB682ZA002
R4181	JAR0816P682D	6.8K	1	D0HB682ZA002
R4182	JAR0816P822D	6.8K	1	D0HB822ZA002
R4213	JAR0816P104D	100K	1	D0HB104ZA004
R4241	JAR0816P153D	15K	1	D0HB153ZA002
R4253	JAR0816P223D	22K	1	D0HB223ZA002
R4254	ERJ3GEY0R00V	1/16W 0	1	
R4257	JAR0816P682D	6.8K	1	D0HB682ZA002
R4265	JAR0816P103D	10K	1	D0HB103ZA002
R4273	JAR0816P682D	6.8K	1	D0HB682ZA002
R4281	JAR0816P682D	6.8K	1	D0HB682ZA002
R4282	JAR0816P822D	8.2K	1	D0HB822ZA002
R4291-93	ERJ3GEYJ471V	1/16W 470	3	
R4301	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R4302	ERJ3GEYJ331V	1/16W 330	1	
R4303	ERJ3GEYJ101V	1/16W 100	1	
R4313-16	JAR0816P104D	100K	4	D0HB104ZA004
R4341,42	JAR0816P153D	15K	2	D0HB153ZA002
R4343,44	JAR0816P822D	8.2K	2	D0HB822ZA002
R4353-56	JAR0816P223D	22K	4	D0HB223ZA002
R4357,58	JAR0816P682D	6.8K	2	D0HB682ZA002
R4361,62	JAR0816P682D	6.8K	2	D0HB682ZA002
R4365,66	JAR0816P332D	3.3K	2	D0HB332ZA002
R4367,68	JAR0816P103D	10K	2	D0HB103ZA002
R4373-76	JAR0816P682D	6.8K	4	D0HB682ZA002
R4381	JAR0816P682D	6.8K	1	D0HB682ZA002
R4382	JAR0816P822D	8.2K	1	D0HB822ZA002
R4383	JAR0816P682D	6.8K	1	D0HB682ZA002
R4384	JAR0816P822D	8.2K	1	D0HB822ZA002

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R4385	JAR0816P682D	6.8K	1	D0HB682ZA002
R4386	JAR0816P562D	5.6K	1	D0HB562ZA002
R4387	JAR0816P682D	6.8K	1	D0HB682ZA002
R4389	JAR0816P682D	6.8K	1	D0HB682ZA002
R4390	JAR0816P562D	5.6K	1	D0HB562ZA002
R4391	JAR0816P682D	6.8K	1	D0HB682ZA002
R4392	JAR0816P332D	3.3K	1	D0HB332ZA002
R4393	JAR0816P562D	5.6K	1	D0HB562ZA002
R4404	JAR0816P104D	100K	1	D0HB104ZA004
R4425	JAR0816P682D	6.8K	1	D0HB682ZA002
R4430	JAR0816P822D	8.2K	1	D0HB822ZA002
R4431	JAR0816P104D	100K	1	D0HB104ZA004
R4437	JAR0816P103D	10K	1	D0HB103ZA002
R4438	JAR0816P223D	22K	1	D0HB223ZA002
R4439,40	JAR0816P682D	6.8K	2	D0HB682ZA002
R4441	JAR0816P822D	8.2K	1	D0HB822ZA002
R4442	JAR0816P103D	10K	1	D0HB103ZA002
R4444	ERJ3GEYJ103Z	1/16W 10K	1	
R4445	ERJ3GEYJ104Z	1/16W 100K	1	
R4446	JAR0816P822D	8.2K	1	D0HB822ZA002
R4447	ERJ3GEYJ103Z	1/16W 10K	1	
R4450	JAR0816P223D	22K	1	D0HB223ZA002
R4456	JAR0816P682D	6.8K	1	D0HB682ZA002
R5201	ERJ12YJ270H	1/2W 27	1	
R5202	ERJ3GEYJ2R2V	1/16W 2.2	1	D0GB2R2JA002
R5203	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R5204	ERJ3GEYJ123V	1/16W 12K	1	
R5206	ERJ3GEYJ154V	1/16W 150K	1	
R5207	ERJ3GEYD562V	1/16W 5.6K	1	
R5208	ERJ3GEYJ101V	1/16W 100	1	
R5209	ERJ3GEYD303V	1/16W 30K	1	D0HB303ZA002
R5210	ERJ3GEYD473V	1/16W 51K	1	D1BB47020002
R5211	ERJ3GEYD183V	1/16W 18K	1	
R5212	ERJ3GEYD562V	1/16W 5.6K	1	
R5213	ERJ3GEYJ103Z	1/16W 10K	1	
R5214-16	ERJ3GEYJ105V	1/16W 1M	3	
R5217	ERJ3GEY0R00V	1/16W 0	1	
R5219,20	ERJ3GEYJ101V	1/16W 100	2	
R6201	ERJ3GEYJ103Z	1/16W 10K	1	
R6208	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R6212	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R6296	ERJ3GEYJ101V	1/16W 100	1	
R6297	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R6298	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
R6299	ERJ3GEYJ181V	1/16W 180	1	
R6301	ERJ3GEYJ103Z	1/16W 10K	1	
R6302,03	ERJ3GEYJ472V	1/16W 4.7K	2	D0GB472JA002
R6502	ERJ3GEYJ221V	1/16W 220	1	
R6503,04	ERJ3GEYJ103Z	1/16W 10K	2	
R6521	ERJ3GEY0R00V	1/16W 0	1	
R6531	ERJ3GEYJ560V	1/16W 56	1	
R6598	ERJ3GEYJ121V	1/16W 120	1	
R6599	ERJ3GEYJ471V	1/16W 470	1	
R6901	ERJ3GEY0R00V	1/16W 0	1	
R7001	ERJ3GEYJ102V	1/16W 1K	1	
R7002	ERJ3GEYJ473V	1/16W 47K	1	D0GB473JA002
RA3001,02	EXBV8V220JV	1/16W 22	2	
RA3003	EXBV4V103JV	1/32W 10K	1	
RA3004	EXBV4V472JV	1/32W 4.7K	1	
RA3008	EXBV4V472JV	1/32W 4.7K	1	
RA3009-13	EXBV8V220JV	1/16W 22	5	
RA3251,52	EXBV8V471JV	1/16W 470	2	
RA3255	EXBV4V473JV	1/32W 47K	1	
RA6201	EXBV4V103JV	1/32W 10K	1	
RA6203	EXBV4V473JV	1/32W 47K	1	
RA6204	EXBV4V103JV	1/32W 10K	1	
RA6205	EXBV8V103J	1/16W 10K	1	D0GZ103J0001
RA6301	EXBV4V473JV	1/32W 47K	1	
RA7001-03	EXBV8V473JV	1/16W 47K	3	
RJ501-27	ERJ6GEY0R00V	CHIP JUMPER	27	
RJ601-16	ERJ8GEY0R00V	CHIP JUMPER	16	
RJ3002	ERJ3GEY0R00V	CHIP JUMPER	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
RJ6610	ERJ3GEY0R00V	CHIP JUMPER	1	
RY251	A-9WK-0H	RELAY	1	
S216	EVQ11G05R	SW,PUSH	1	
S610-15	EVQ11G05R	SW,PUSH	6	
S617,18	EVQ11G05R	SW,PUSH	2	
S790,91	RSH1A005	SW,OPEN/CLOSE DET.	2	K0J1BB000010
VR3511	VRV0293B102T	VR,C-ADJUSTMENT	1	
VR3521	VRV0293B102T	VR,Y-ADJUSTMENT	1	
X201	RSXY8M00D01T	OSCILLATOR	1	H2B800400005
X6501	VSX1044	OSCILLATOR	1	H0J368500003
Z2001-05	ELKE103FA	CHIP L	5	
Z3501	ELB4D565	VIDEO FILTER	1	

19 Cabinet parts Location



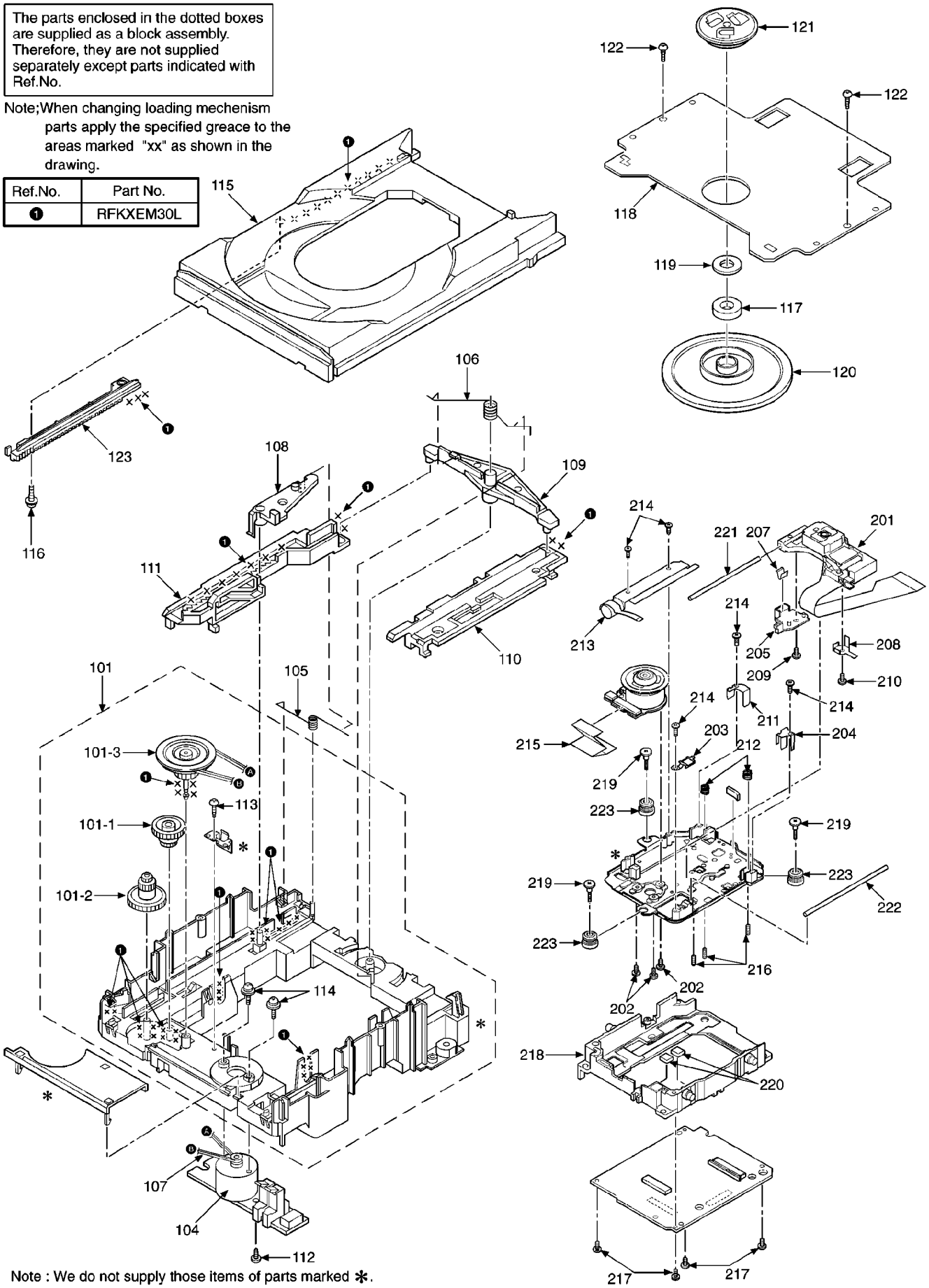
Note : We do not supply those items of parts marked ✻.

20 Loading Mechanism Parts Location

The parts enclosed in the dotted boxes are supplied as a block assembly. Therefore, they are not supplied separately except parts indicated with Ref.No.

Note;When changing loading mechenism parts apply the specified greace to the areas marked "xx" as shown in the drawing.

Ref.No.	Part No.
❶	RFKXEM30L



Note : We do not supply those items of parts marked ✻.

ORDER No.AD0306524S5

A6

Service Manual

DVD Audio / Video Player

SL-HDA710

Colour

(N).....Gold Type

Areas

(PP).....U.S.A. and Canada.

(E).....Europe.

Addition of Ref. No. of Spindle motor.

Please use this supplement manual together with the service manual for / Model No. SL-HDA710 (PP) (Order No. AD0009156A1), / Model No. SL-HDA710 (E) (Order No. AD0008146C2).

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. Purpose

The notice of Spindle motor's Ref. No. and Part No..

2. Replacement Parts List

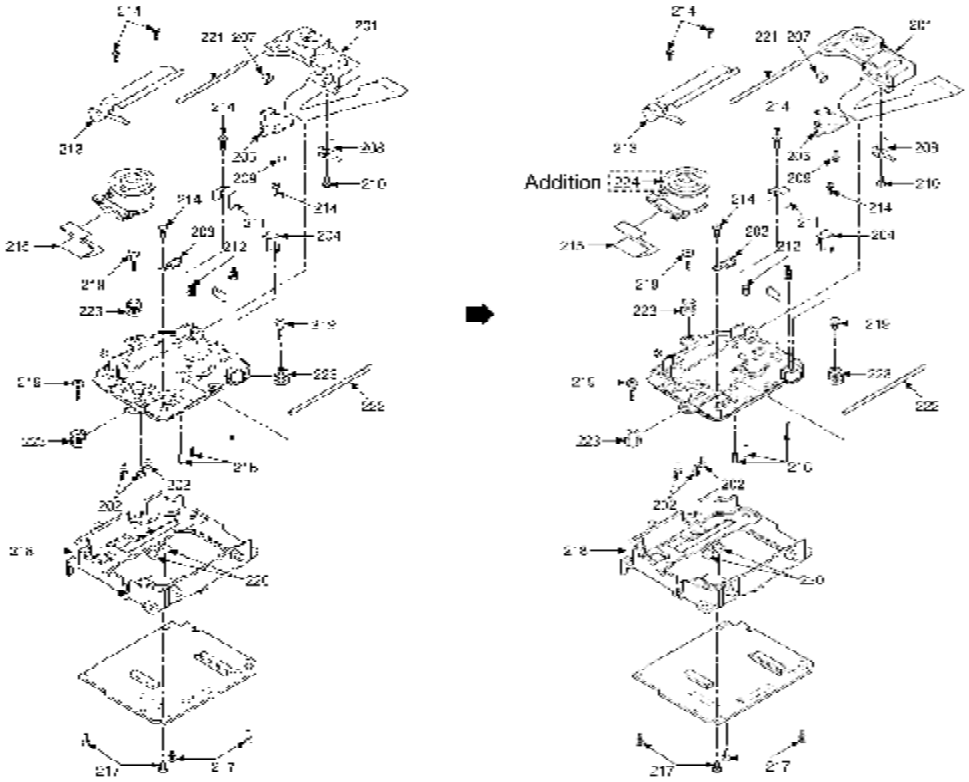
Note:
This part is supplied by S.P.C..

Ref. No.	Part No.	Part Name & Description	R
224	BML3E4CRU	SPINDLE MOTOR	

3. Change in Loading Mechanism Parts Location

< Wrong >

< Right >



H0306TN/AM